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"MADNESS (YET THERE'S METHOD IN IT)."

U. S. (*as Hamlet*). "Go thy ways to a nunnery.........For wise men know well enough what monsters you make of them. To a nunnery, go; and quickly too. Farewell."

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HARPER'S WEEKLY.

SATURDAY, JANUARY 15, 1876.

NEW SERIAL STORY BY BLACKMORE.

☞ *In the present Number of* HARPER'S WEEKLY *will be found the opening chapters of a new Illustrated Serial Story, under the title of*

"CRIPPS, THE CARRIER,"

BY R. D. BLACKMORE,

Author of "The Maid of Sker," "Lorna Doone," "Alice Lorraine," etc.

☞ *The* ILLUSTRATED SUPPLEMENT *sent out gratuitously with this Number of* HARPER'S WEEKLY *contains an elegant engraving,*

"PLAYING THE GUITAR,"

and an illustrated review of "RECENT INVENTIONS."

An illustrated SUPPLEMENT *will be issued gratuitously with the next Number of* HARPER'S WEEKLY.

THE PEOPLE AND THE PRESIDENCY.

A CORRESPONDENT in Ohio, who indignantly remonstrates with us for opposing the renomination of the President, says: "If the people should rise up *en masse* and demand his services, he would do as he has heretofore done at the command of the people—yield his preference." The London *Spectator*, also, does not see why the people of the United States should not elect a President whom they like as often as they choose. And newspapers at home, which understand the matter very much better than our indignant correspondent or the London *Spectator*, also declare that there is no constitutional prohibition, and that if a President may properly be re-elected once, there is no good reason that he should not be elected for a third time. It is undoubtedly true that the argument against a third term is, at the present time, equally an argument against the second. But a practice coeval with the government, which has the force of a constitutional sanction, and which began under essentially different circumstances, has virtually extended the term of a popular President to eight years. But acquiescence in this second term has been attended with the most inflexible hostility to a third nomination, so that the same persons who looked upon a second term as permissible were resolutely opposed to a third.

The reasons were plain enough. They were foreshadowed by WASHINGTON in his original refusal to accept a second term, and were more distinctly stated by JEFFERSON in reply to urgent invitations to accept a nomination for a third term. "If some termination to the services of the Chief Magistrate be not fixed by the Constitution or supplied by practice, his office, nominally for years, will in fact become for life, and history shows how easily that degenerates into an inheritance." DE TOCQUEVILLE, the most impartial and sagacious of commentators upon our government, strongly sets forth the reasons why the eligibility of the President to re-election is a weakness of the Constitution; and FREEMAN, the most thorough living student of the federative elective system, after carefully and justly weighing the merits of the question, pronounces against any re-eligibility. Yet WASHINGTON and JEFFERSON and DE TOCQUEVILLE saw the question under the essentially different circumstances to which we have alluded. They reasoned in great part abstractly, and not from experience, but none the less surely and conclusively. The executive power commanded the patronage of office. In this and in all that it involves they saw boundless opportunity of intrigue and corruption, which the ambition of an incumbent would not fail to use. The chief aim of an Administration would be its own continuance, and the result would at last be a life tenure with hereditary reversion. And this is a plain possibility, which can be effectually obviated only in one of two ways: either by a constitutional limitation of the term, or by a reasonable system of appointment in the civil service.

But if this was a danger which an American like JEFFERSON instinctively felt, and a Frenchman like DE TOCQUEVILLE logically perceived, when the executive power through patronage was insignificant, and when, consequently, party organization was comparatively loose and slight, how great and immediate the peril is when the executive patronage is so enormous as it has now become, when it is exercised solely upon partisan and personal grounds, and when, in consequence, party organization is thorough, absolute, and remorseless! Our Ohio correspondent and the London *Spectator* ask why the people should not re-elect a President if they prefer him to any other person, and whether eminent public service should disable an American citizen. The *Spectator* speaks as if the United States were a little Swiss canton. In Schwytz, Uri, and Unterwalden all the freemen meet every spring in a field, and when the magistrate lays down the insignia of office, they summon him, if they so prefer, to resume them. That is pure democracy, the government of a homogeneous community of a few thousand persons by town-meeting. But the United States are a vast representative republic; a community of forty millions of people, distributed among thirty-seven States, covering a continent, and acting politically through party organizations. In a Presidential election "the people" vote indirectly for one of two—seldom more—candidates, who are nominated by a party Convention. There is virtually no choice but between the candidates so nominated, and the choice of the party which has the constitutional majority is what is called the choice of the people. Every thing, therefore, depends upon the nominating Convention. If that is a free, full, fair representation of the preference of the party, and the candidate is elected, the result is as nearly as practicable the choice of the people. But with the present vast expansion of the national civil service, and its complete partisan organization, a party Convention almost necessarily represents not so much the feeling and wishes of the mass of the party as the interests and purposes of party managers and office-holders. They have a vital interest in the perpetuity of an Administration by whose favor they hold the means of livelihood, which naturally surpasses the general interest of the citizen in politics, and, in fact and experience, this class controls the primary meetings and conventions of the Administration party in every State of the Union. If, now, the official head of the Administration and of the party should be bent upon a renomination, although the great majority of the party may be opposed to it, can not our correspondent and the London *Spectator* see that he has a power, first in the State Convention and then in the national, which may very easily prevail over the real wishes of the party and of "the people?" The argument of the *Spectator* assumes that a President enters the nominating Convention on the same terms with every other citizen. The truth is that there is no equality whatever. A President has an immense and overpowering advantage over every possible competitor. TYLER and JOHNSON can not be instanced as showing that this is not so, because they had both totally alienated the party that elected them.

Look at the Southern States. Every one of them will send a delegation to the Republican nominating Convention; but not more than two or three of them will probably give their votes to the Republican candidate. In every one of them the party is managed by the holders of national offices, who are appointed by the President. The State Conventions will send such delegates as the office-holding interest may prefer. Except in two or three, they will represent no vote in the election, but they may readily control the nomination against the wish of delegates who really represent the best sentiment of the party. We are not saying that Republicans in Democratic States should not be represented in the Convention. But we are saying that the representation in those States will be not that of the party, but of the President's agents, and that if the President, whoever he may be, is anxious for a renomination, those agents, the creatures of his favor, and whose interests are identical with his, will faithfully and zealously co-operate with him. Look also at the Northern States. Party organization is not less thorough here, but there is, of course, infinitely more independence among members of the party. The Presidential election really begins in the "primaries" of city and county previous to the State Convention. They determine the character of the county, then of the State, then of the National Convention. Now, in those primary meetings, as at each of the conventions, the office-holding interest will be the most united, watchful, and active, unless there be here and there a special and organized opposition to it. Let us suppose it to be known to that interest that a President is not averse to a third nomination, but that a part of the party is. What will its action probably be? Where do its own advantage and its views of probable political motives and conduct point? Evidently to furthering the design of the Executive, and to trusting party spirit to coerce, cajole, or intimidate the recusants.

And do they reckon entirely without their host? Here in the State of New York the better Republican sentiment is strongly opposed to a renomination of the President. The leading Republican papers have spoken emphatically against it. The Republican Convention has declared unreservedly against it. But if it should be effected in the National Convention, how many of those Republican papers would oppose the regular Republican nomination? How many of the party leaders in the various districts who now declare themselves opposed to a third term would not support the nomination, publicly because, although it may be bad, a Democratic restoration would be worse, and privately because to break with the party would be to destroy their political prospects? Would the managers be reckoning entirely without their host? They know that the Republican opponents of a third term must take one of several courses. They must vote for the Democratic candidate, or not vote at all, or vote for some third candidate, or surrender, and, for the reasons we have mentioned, sustain the party action. But very few sincere Republicans who truly comprehend the catastrophe of a Democratic restoration in this country would vote directly for the Democratic candidate; and most Americans are too practical not to recoil from the impotence of non-voting; while voting for a third candidate is not simply the writing the name of a fit person upon a slip of paper and dropping it in the box, but it implies an organization, hard work, expense, and the nomination, in New York, for instance, of more than thirty persons selected from every part of the State as electors. Would the managers of a renomination reckon quite without their host?

They could not, indeed, secure the re-election. They could not carry New York. But they could secure the defeat of the Republican party. Although the renomination might count upon a general party support, all the results of late elections show that that would not be sufficient. There would be a strong Republican minority in every State large enough and resolute enough to decide the election, which, clearly foreseeing the peril of a Democratic success and refusing to vote for a Democratic candidate, would yet regard the third term as the greater evil, not because it would violate a precedent, but because it would really subvert the government. It would be virtually a Presidency for life, not by the preference of the people, but by a skillful management of the power of executive patronage and of party spirit. It is to prevent even the beginnings of such a result, to continue the ascendency of the Republican party, and to save the country from the degradation and reaction of a Democratic recovery of the national government that every Republican should feel it to be his imperative duty to make a renomination impossible.

THE CHOICE BETWEEN PARTIES.

IN the ardor of conciliation which we are told is to mark the Centennial year upon which we have now entered, we must not forget facts nor disregard human nature and the lessons of experience. The antecedents and action of the Democratic majority in the House of Representatives suggest grave reflections; and as a Presidential election occurs this year, it is useful to look at the general considerations which should influence the decision of the country. Those who have come to the conclusion that the Republican party is hopelessly corrupt, and that the one indispensable thing is the election of a Democratic President, are, of course, beyond argument, as they have taken leave of common-sense. It is, indeed, possible that the action of the Republicans may lead to a Democratic victory by offering the alternative of a graver peril. But it is not easy to see that Democratic success could be other than a national misfortune. And the first and most vital consideration in considering the election is not the financial question, nor the sectarian question, nor the question of administrative reform, but it is the composition, character, convictions, traditions, and tendencies of the two political organizations which will dispute the election. And this is the foremost consideration because upon these the policy and conduct of the Administration will depend. In this view, what is to be said of the Democratic party?

Political history is continuous in the sense that there are no abrupt and radical changes in political feeling. The end of the war of the rebellion was no more the end of the principles, habits of thought, sectional and political differences, from which it sprang than the coronation of WILLIAM and MARY was the end of Jacobite faith and politics in England. We gladly welcome every sign of greater harmony between the late Confederates in this country and the supporters of the Union. But no pleasant episodes like those in Boston last summer, and no newspaper vociferation that by-gones are by-gones, and that we are all loving brethren, and he is a fool or a rascal who does not know it, can change the fact that those who were bred in hatred of the Yankees and the Union, who, as friends of free popular government, sustained and defended the barbarism of slavery, who were essentially aristocrats and monarchists, and who held wholly aloof from the movement of the age, and the expansive, generous, and progressive spirit of the rest of the country, have not suddenly changed their natures and convictions, and become released from all the influences of their training and traditions, merely because they have been conquered in the field. Such a result was never known in any country at any time, and it certainly has not been accomplished here. In speaking of Mr. MORTON'S "national" resolutions, the Mobile *Register*, edited by JOHN FORSYTH, one of the original Confederate leaders, and the best exponent in the country of the late Confederate sentiment, says, frankly:

> "Mr. MORTON wishes to force the Southern Senators to say that when conquered they did not surrender their belief in the principles of our government. What does he gain by this? A man who believed in the right of secession in 1860 believes in it to-day, whether whipped or not. The remedy for wrongs in the Union by peaceable separation of the States is a dead question. Every body knows it is dead and buried in a million graves. The Northern people do not expect us to basely betray our consciences. When the vote is put, we hope our Southern Senators will vote boldly just exactly as they please, and let the consequences rest with justice and with God."

That is to say, the late war has shown that secession can not at present be enforced. It is precisely what an English Jacobite would have said after the failure of 1715.

We make all allowance that can be claimed for pride and anger and folly and "cussedness." But we Unionists know what we should still have thought and felt if we had been beaten, and we need not suppose that our opponents are not made of the same clay. Now the important fact is that the strength of the Democratic party lies in that part of the country where the feelings and opinions of the dominant and ruling class are expressed by such papers as the *Register*. That class for many years before the war determined the policy of the Democratic party, exposing the country to the just scorn of the world by its insolent slavery propaganda, by which also it sought to degrade and debauch the national character. It ruled the party because it had a positive and definite purpose, and carefully trained its political agents to secure it. The party to-day in the other States is strongest among the worst population of great cities. In New York, for instance, when it has a majority, it is in the city of New York, and in the least enlightened parts of the city. In New England, in New York and Pennsylvania, in the West and Northwest, the party is not strong. Its citadel is in the Southern States, and the ruling class there has its own feelings, principles, and purposes. It is united, able, and resolute. Because of this, and because it is absolutely essential to the party success, it will naturally and necessarily control the party policy. The Democratic party in the other States has no common principle or purpose. It proclaims reform, but nowhere does it even pretend to attempt it except in the State of New York, and its prestige there is entirely eclipsed by the sturdy and successful reforms of the Republican Secretary BRISTOW. Meanwhile it is hopelessly divided upon the financial question, the New York wing declaring for hard money, and the party in Pennsylvania and Ohio marching under the rag banner. The one part of the organization which is heartily united is that in the Southern States, where the strength of the party lies, and where its real drift, should it obtain power, must be sought.

Is this the leadership to which the government should be confided in the Centennial year? As the political principles and convictions of "the North," as deeply rooted and inflexible as those of "the South," have after a long and terrible war finally prevailed; as the Constitution has been amended in accordance with them; as the government and the Union have been renewed in the spirit of "the North," of which the Republican party is the political organization —is it reasonable to suppose that a party

naturally and sincerely hostile to that spirit would administer the government more wisely and safely than the Republican? Great changes in consequence of the war and of emancipation have undoubtedly taken place, and will not cease. A more intelligent and sincere sympathy is springing up between the long-alienated sections. Many of the soldiers both of the blue and the gray are full of chivalric feeling, and spurn vindictive recriminations. The folly of the doctrine of a constitutional right of secession is more and more evident even to the most Bourbon element of "the South." All this is true, and he would be very foolish who did not see and acknowledge it. But he would be equally blind and narrow who supposed that because conciliation is most desirable, and is to be patiently and persistently sought, it is therefore accomplished; and that because they have been beaten in the field, those who have always held the sovereignty of the States and the rightfulness of slavery, who were really monarchists, and wholly without sympathy with the American idea of equal rights before the law, have become the best friends of the Union and of political justice, and the safest guardians of the government. Neither they nor the party of which they are the main support, whatever candidate they may nominate and whatever professions they may make, should be called to power in preference to the Republican party with any candidate against whom no reasonable objection can be urged. At the present time nothing seems more certain than Republican success with such a candidate, for the nomination of such a candidate would be the proof to intelligent and patriotic men that administrative reform, a sound financial policy, and the truest sympathy with the provisions of the amended Constitution could be more reasonably expected from the Republican than from the Democratic party.

REPUBLICAN DUTY IN SOUTH CAROLINA.

MR. MORTON'S Mississippi resolutions are doubtless introduced in the interest of the Republican party. But the welfare of that party is much more involved in the late proceedings in South Carolina. The charge in Mississippi is that the Democrats have intimidated the colored Republican voters, but the fact in South Carolina is that the colored Republican voters have elected two of the most notoriously corrupt and dangerous men in the State to the bench of the Circuit Court. This is an event which not only most justly threatens Republican ascendency in South Carolina, but threatens the dearest interests of every citizen of the State. It is an evil that can not be reached by an investigating committee of Congress, but it is one that can not fail to wound the Republican party every where. That party can stand before the country and can hope for success this year only as it is believed to be substantially honest and bent upon good government. It has undeniably fallen under suspicion, and such acts as the election of MOSES and WHIPPER to be judges, unless most promptly and unreservedly denounced by the great mass of the party, will tend to change suspicion into indignation, and doubt into disgust. Republicans should understand that to try to save the seven electoral votes of South Carolina by tolerating or glozing over the infamy of the election of these men by the Legislature will be to lose not only those votes, but a great many more in other States.

Does any Republican think that Secretary BRISTOW has injured the party by his brave and vigorous and thorough assault upon a fraudulent conspiracy in the party itself? Does any Republican think that the party was injured in New York at the late election by its commendation of the war upon the Canal Ring? Does any Republican in this State imagine that the party can gain by excusing or sustaining the conduct of the Auditor, as lately disclosed, which, although not showing fraud, does show a lamentable want of official honor? That in so vast a country as this, with a myriad offices of every degree of responsibility to be filled in accordance with a system that defies experience and common-sense, and with immense opportunities for swindling, there should be great frauds and great delinquents, is not surprising. These are misfortunes that befall every party. But they become fatal injuries only when the party is too timid to expose and pursue and punish them. Every intelligent man knows that the action of Secretary BRISTOW strengthens the party and improves its prospects for this year, and that the hearty Republican approval of the canal war in New York largely contributed to the reduction of the Democratic majority of a year ago.

We trust that Governor CHAMBERLAIN and his friends in South Carolina will not hesitate to declare unconditional war upon the party management of MOSES, WHIPPER, ELLIOTT, DAVIS, JOHNSTON, and the other leaders in the late outrage. Mr. ELLIOTT is the Speaker of the House. In seconding the nomination of WHIPPER he said that he would measure the Republicanism of members by the votes they should cast upon the occasion. In nominating MOSES, Mr. JOHNSTON said that while he may have had his faults, yet they were all on the Republican side, and that Republicans should recognize his devotion to the State, and especially to the Republican party. The result in the Legislature apparently shows that these men control or will control the Republican organization in the State. It is for the honest men of that party in South Carolina and elsewhere to decide whether the organization in such hands ought under any circumstances to be sustained.

Governor CHAMBERLAIN has been a strict party man. He has, indeed, supported the party when, as a good citizen, the task must have been very severe. But the time has surely come for him and those who agree with him to break with the organization controlled by MOSES and his followers, and to leave the responsibility of results where it belongs. He could not do himself, his party, his State, and his country a greater wrong than to give his name and character and influence to such a conspiracy, for the sake of his party ascendency. It would be to repeat the great error of Governor TILDEN during the supremacy of TWEED in the Democratic party of New York—the error to which party spirit and political ambition always tempt, but which a lofty political manhood scorns and withstands. The Republican party can bear the loss of seven electoral votes conditioned upon the support of MOSES and his men, but it can not bear the responsibility of their characters and conduct. The duty of all good citizens in South Carolina is to unite to save civil order itself. This is not the time to bandy criminations as to the original responsibility for the situation, but to remedy it, and the first remedial step is unbending opposition to the corrupt leadership of those who have just elected MOSES and WHIPPER. In taking such a position, even to a breach in the party, we believe Governor CHAMBERLAIN and his friends would be sustained by the patriotic and Republican sympathy of the country.

REPEAL OF THE GRAY NUNS ACT.

AN extraordinary act was passed by the New York Legislature last May, which we trust that the present Legislature will repeal without delay. We mean the Gray Nuns Act, which authorizes the Superintendent of Public Instruction to issue a certificate of qualification as a teacher in the common schools to any graduate of its seminaries to whom the Roman Catholic Sisterhood of Gray Nuns may have awarded a diploma. This astounding bill finally passed the Senate unanimously, the Governor signed it, and thus exclusive rights and privileges in the public schools were conferred upon the sect which is their open and uncompromising enemy. As the Legislature in both branches is strongly Republican, there can be no good reason for delaying the movement for repeal. There will undoubtedly be petitions presented asking for repeal, but the Legislature need not wait for them. The act is wholly sectarian. It substantially empowers a sectarian body to furnish teachers for the schools. And it is surprising that it should have been reported by the Republican chairman of the Senate Committee on Charitable and Religious Societies. Here was an admirable opportunity for the Governor to return the bill to the Legislature with a statement that it really contravened the spirit of the Constitution. But it is just the kind of opportunity which Democratic Governors are careful not to improve. And whenever the facts are pointed out and the special privilege to this particular sect is exposed, the Democratic press warmly deprecates religious agitation in politics. So in ancient times, when the Abolitionists laid bare the infamies of slavery, they were denounced as incendiary disunionists.

This Gray Nuns Act is another illustration of the constant and insidious effort of the Roman Catholic hierarchy to obtain control of the schools which it wishes to destroy. If any other sect or body of clergymen should engage in such attempts, they would be equally censured by the intelligent press of the country. If the defense of the schools seems to be directed against one religious body, it is only because the danger proceeds from that body. When the priesthood of the Roman Church is content to occupy the same position that every other body of religious ministers in the country holds, the Catholic sect will be no more especially suspected and watched and exposed than any other. But so long as it declares open war upon one of the most cherished institutions of the country, to which very much of the national character, power, and prosperity is due, it may be perfectly sure that it will encounter the most constant and inflexible opposition—an American resolution that will only smile at the feeble clamor of "religious agitation" and "mixing religion with politics."

PERSONAL.

IT is stated that Father HYACINTHE is about to make this country his future home, and will become pastor of a church in Boston. He is now forty-nine years old. His first outspoken work of heresy was in 1869 in a lecture before the International League of Peace, in which he spoke of the Jewish religion, the Catholic, and the Protestant as being "the three great religions of civilized peoples." From this he went further and further until 1872, when he married Mrs. MERIMON in London, Dean STANLEY officiating. Since then he has had a sort of church at Geneva, but does not appear to have had a strong following.

—The plan of making England the purchaser of the Khedive's interest in the Suez Canal, and its practical controller, for $20,000,000, was substantially the work of Mr. FREDERICK GREENWOOD, editor of the *Pall Mall Gazette*, and one of the most capable of London journalists. The memorandum drawn up by him setting forth the arguments in its favor is said to have made a deep impression on Mr. DISRAELI, and secured his adhesion.

—An "English Jew" recently asserted that it was utterly impossible to convert a respectable Jew to Christianity. In contradiction it was stated that the present Prime Minister of England is a convert from Judaism. To this it was replied that DISRAELI the elder "had a quarrel with the Portuguese synagogue about money matters, and thereupon left the synagogue, and his son somehow became a church-goer, but it is a fact that BENJAMIN DISRAELI has never been baptized as a Christian."

—The Rev. CHARLES W. BAIRD, of Rye, New York, is writing a history of the Huguenot settlements in the United States. It is about two hundred and fifty years since the Huguenots first came to New York. Soon afterward they scattered over Westchester County, and were quite strong in New Rochelle, where many of their descendants still survive.

—During the late canvass for the organization of the House of Representatives, Congressman COX requested his wife to answer all applications for office by requesting the applicant to bring his own State delegates as a unit. Mrs. COX answered a Delaware applicant in that way, and as Delaware has only one member, the applicant reported to Mr. COX at Washington that his member was a unit for him.

—Secretary of State WILLERS has compiled from the census of this State, taken last June, a list of one hundred and nine people in the State of New York who are over one hundred years of age, giving their names and residences. The oldest is SARAH HICKS, of Brooklyn, aged one hundred and fourteen. Five others live in Brooklyn. Twenty-nine live in New York city, of whom the oldest, CATHERINE CAMPBELL, is one hundred and eleven.

—In Mr. SAMUEL SMILES's new book, *Thrift*, just published by HARPER & BROTHERS, we find the two following noteworthy examples of the successful practice of that virtue: "The tenth Earl of Buchan brought up a numerous family of children, one of whom afterward rose to be Lord Chancellor of England, upon an income not exceeding £200 a year. The late Dr. AITON said that his father brought a still larger family up on only half the income of the Earl of Buchan. The following dedication, prefixed to his work on *Clerical Economics*, is worthy of being remembered: 'This work is respectfully dedicated to a father, now in the eighty-third year of his age, who, on an income which never exceeded a hundred pounds yearly, educated, out of a family of twelve children, four sons to liberal professions, and who has often sent his last shilling to each of them in their turn when they were at college.'"

—Mr. JOSEPH H. CHOATE, at the last annual dinner of the New England Society, maintained his reputation of being the most felicitous after-dinner speaker in the country. His address sparkled with wit from first to last. Those who hear him on these occasions can hardly imagine the contrast he presents when he appears before judges and juries as the cold, clear, incisive, exacting lawyer. After all, when it comes home to our bosoms as well as to our business, of what value are the pandects of JUSTINIAN as compared with the stew-pandects of DELMONICO?

—Of the late WILLIAM B. ASTOR it is said that he used no tobacco and little wine, though when in health formerly he gave quiet, pleasant dinners. He seldom was out late, did not attend theatres, did not get excited nor indulge in profane adjectives, sported not with dogs and guns (nor do the two sons who are his principal heirs), never kept a fast horse, never gambled. His whole life was simple and orderly. He could never be induced to "take the chair" or enter into politics, and had small respect for or confidence in the "great man" of the period. He minded his own business.

—Colonel MORRISON, the chairman of the Committee of Ways and Means, commanded the Forty-ninth Illinois Regiment in the bloody engagements on the extreme right of General GRANT's line at Fort Donelson, where he received a musket-ball through the body, and was reported among the killed. He recovered, however, but was never able to return to service; and the nature of his wound—a shot through the lungs—is said to be the cause of his present inability to make a speech of any length.

—A Washington letter-writer says: "To-day I saw old General SUTTER, on whose land gold was first discovered in California, stepping out of a street car. A more pitiable instance of great old age unaccompanied and neglected I never knew. He is now over eighty, and lives in a little cottage at Litiz, Pennsylvania, where he is educating his granddaughter at a German school."

—The Philadelphia *Evening Bulletin*, remarking upon the typographical elegance of the HARPERS' edition of FORSTER's *Life of Jonathan Swift*, suggests that the book is printed from English stereotype plates. It may please our amiable contemporary to learn that not only were these plates made in New York, but that Messrs. HARPER & BROTHERS have furnished the plates for the English editions of several important works, notably NORDHOFF's *Communistic Societies in the United States* and VAN-LENNEP's *Bible Lands*, and also that the plates for the English edition of SQUIER's forth-coming work on Peru will be made by the same firm. A great advance has been made in the art of typography within the last few years in this country, and American printers have not only overtaken, but surpassed, their English rivals in the elegance as well as the general accuracy of their work.

—Boston has a few men who, in view of the taxes they are obliged to pay, may be considered wealthy. The largest payers are the SEARS estate and the Fifty Associates. After them are assessments as follows: MOSES WILLIAMS, $2,531,400; H. HOLLIS HUNNEWELL, $1,716,700; JOHN A. LOWELL, $1,405,400; WILLIAM MINOT, Jun., $1,183,600; JAMES PARKER, $1,095,500; FREDERICK R. SEARS, $1,262,200; HENRY R. WILLIAMS, $1,032,500; ARIOCH WENTWORTH, $1,022,400; WILLIAM W. TUCKER, $1,181,900. CHARLES FRANCIS ADAMS is assessed for $856,000.

—Colonel VILLETTE, the aid-de-camp of Marshal BAZAINE, who aided in his escape, has finished the period of his imprisonment to which he was sentenced, and has become a wine-merchant in order to earn a living, as he has been deprived of the right to a pension.

—Ex-Speaker BLAINE was in early life a professor of mathematics in Drennon College, Kentucky, and General BUSHROD JOHNSON, of Nashville, Tennessee, was a professor in the same institution. Several citizens of Tennessee, educated at Drennon, have diplomas with the signatures of Messrs. BLAINE and JOHNSON attached.

—It has been given to Italy to present to the world one of the greatest benefactors of any age. The Duke of Galliera, one of the richest noblemen in Europe, has recently made his native city, Genoa, the munificent present of 22,000,000 francs, to be expended in enlarging the port. A few years ago he presented the gorgeous Brignole Palace to the city of Genoa, together with its superb gallery of paintings, which includes many notable Vandycks. He has also built a hospital, a church, and a whole street of model lodging-houses for the poor.

—Mr. GLADSTONE abandons theology for the purpose of resuming the classics, and will soon give to the public a new book on *The Time and Place of Homer in History*.

—Mr. E. C. STEDMAN is quite warmly praised in a recent number of the London *Saturday Review* for his admirable volume, *The Victorian Poets*, a full page being devoted to him. It commences by saying: "A question fairly raised by this volume is, whether elaborate criticism of contemporary literature is in and for itself a very desirable thing, or at least so desirable as to repay the great expenditure of reflection and labor which it must involve if it is conscientiously done. That question, however, we do not intend to discuss at present. It is a fact that this is a critical age, and that the kind of work is in vogue, and, like all things in vogue, is often done ill; and, whether our own taste is much drawn toward it or not, we ought to be thankful to those who do it with competent skill and understanding, with honesty of purpose, and with diligence and thoroughness of execution. And Mr. STEDMAN, having chosen to work in this line, deserves the thanks of English scholars by these qualities and by something more. He may not have the large wisdom or the keen insight and delicate touch which accompany literary judgment of the highest kind, and make even criticism almost creative, and which are seldom found apart from considerable powers of original production. But he is faithful, studious, and discerning; of a sane and reasonable temper, and in the main a judicial one; his judgment is disciplined and exercised, and his decisions, even when one can not agree with them, are based on intelligible grounds."

DOMESTIC INTELLIGENCE.

ON recommendation of the Commissioners of the Canal Fund, Governor Tilden, December 28, removed Canal Auditor Thayer from office. George W. Schuyler, of Ithaca, has been appointed his successor.

An explosion of fire-damp occurred in the Hutchinson Mines, near Kingston, Pennsylvania, December 28, killing three men and severely injuring a number of others.

News was received in San Francisco, December 29, that a fight had just taken place between the State troops and revolutionists in Sonora, twenty-five miles south of the boundary line, and that the former were defeated, with ten killed.

President Grant has signed the bill extending the term of the Court of Commissioners of *Alabama* Claims to the 22d of July next.

FOREIGN NEWS.

THE English Admiralty authorities have issued a new circular on the subject of fugitive slaves. It orders that any slave received on a British man-of-war on the high seas shall be retained aboard until he can be landed in a country or transferred to a vessel where his liberty will be secure. Fugitive slaves asking admission to a British man-of-war when in the territorial waters of a foreign state must only be admitted if their lives are endangered, and must not be kept on board after the danger is passed; but no demand for the surrender of a slave is to be entertained by a British officer.

A terrible hurricane swept over the Philippine Islands November 30. The storm was particularly severe in the provinces of Albay and Camarines, which form the southeastern part of the island of Luzon. Two hundred and fifty lives were lost, and three thousand eight hundred dwellings destroyed. Many cattle perished, and crops every where were ruined.

Ex-President Thiers has written a letter reserving the right to choose between the Senate and Chamber of Deputies if he should be elected to both Houses. He adds that all his wishes are for the establishment of the conservative republic.

A frightful accident occurred in the little village of Hellikon, Switzerland, on Christmas-day. The festivities of the day were being celebrated in a school-house, when the flooring gave way, and eighty persons were killed and fifty wounded.

The royal palace at Barcelona, in Spain, was almost entirely destroyed by fire December 26.

The Spanish government is said to have concentrated a force of 80,000 troops in Navarre and Alava.

The French Assembly decided, December 29, to maintain martial law in a modified form in all the large cities and towns of the republic. All the clauses relating to the Press Bill were adopted the same day. Prefects are deprived of the power of summarily forbidding the sale of journals in the streets.

THE (D. D.) FIELD OF GOLD, OR THE LION'S LEGAL (?) SHARE.

A BEAR HUNT.

THE wild and rugged fastnesses of the Rocky Mountains are the favorite haunts of several species of the great family of bears. First among them in respect to size, ferocity, and tenacity of life comes the powerful grizzly, which bears the same relation to American beasts of prey that the royal Bengal tiger does to those of India, and the lion to those of Africa. Its range is from the vast plains lying between the Missouri and the Rocky Mountains through Upper California to the Pacific Ocean. The grizzly is the most savage of his race, and many thrilling stories are told by Western hunters of their encounters with him. If attacked and wounded, he will pursue the assailant to the last, and will not give up the struggle till he or the unfortunate hunter is killed. His tenacity of life is extraordinary. One has been known to survive many minutes after receiving ten or more rifle-balls through his body, some of them in vital parts. This makes him a most dangerous and formidable antagonist, and few even of the most daring of hunters care to provoke him single-handed to a combat.

The bear in our illustration belongs to a less dangerous family, the black, though when hard pressed for food, or brought to bay, it will attack man with great bravery, and in defense of its young it will fight with courage and ferocity. The latter is the incident chosen by our artist. A female bear has been tracked to her lair, where she stands at bay for the protection of her defenseless young. Sentiment has no place among the mental qualities of the NIMRODS of the Rocky Mountains, and the unerring rifle will soon put an end to her life.

Civilization advances rapidly toward the slopes of the Rocky Mountains. The grizzly and the black bear and all their weaker relations are year by year driven further and further into the remoter and wilder regions, where the pursuit of them will become more hazardous to life and limb.

THE HON. D. H. CHAMBERLAIN, GOVERNOR OF SOUTH CAROLINA.—[PHOT. BY SARONY.]

GOVERNOR CHAMBERLAIN.

THE HON. D. H. CHAMBERLAIN, Governor of South Carolina, whose action in regard to the recent election of MOSES and WHIPPER as Circuit Judges entitles him to the commendation and support of the honest men of both parties, was born in West Brookfield, Massachusetts, June 23, 1835. He began his education in the common schools of his native town, and prepared for college at the High School of Worcester County and at the Phillips Academy, in Andover. On graduating from Yale College in 1862, he studied his profession at the Harvard Law School. In 1863 he entered the army, and served in Maryland, Virginia, and Texas until the fall of 1865.

In December of that year he removed to Charleston, South Carolina, and engaged in planting on John's Island. He was elected to the State Constitutional Convention, called under the reconstruction acts, and took a prominent part in its labors and discussions. In 1868 he was elected Attorney-General of the State, and held the office until 1872. During the next two years Mr. CHAMBERLAIN pursued the practice of law in Columbia, and was acknowledged to be one of the most able and accomplished lawyers in the State. In the autumn of 1874 he was elected Governor of South Carolina, after a severe and bitter contest. During the campaign he promised reform in the State government, and he has thus far shown a sincere determination to redeem his pledges. Even his most pronounced opponents now concede the integrity of his efforts to expose and defeat fraud, and to secure good government to the State.

The election of MOSES and WHIPPER by the Legislature was accomplished by trickery during the absence of Governor CHAMBERLAIN, who, relying on the Speaker's pledge that the election would not take place until his return, had left the capital to keep an important professional engagement at Greenville. The election seems to have been conducted in a disorderly and boisterous manner. As one "slate" candidate after another was elected, the halls and lobbies rang with shouts of "Victory," "Glory," "We've beat CHAMBERLAIN," "No Democrat need apply," etc. After the work was accomplished, the supporters of MOSES and WHIPPER marched about in squads, singing improvised doggerel couplets to the dignified tune of "Old Aunt Jemima."

Governor CHAMBERLAIN was, however, prompt to take action in the matter. He at once notified all concerned by proclamation that he would not issue commissions to MOSES and WHIPPER. In this determination he is sustained by the better part of the citizens. An enthusiastic mass-meeting, composed largely of substantial business men, was held at Charleston on the 28th of December, at which resolutions strongly denouncing the election of MOSES and WHIPPER, and sustaining the Governor's course, were adopted by acclamation.

[Published by Special Arrangement with the Author.]

DEAD MEN'S SHOES:

A Novel.

BY MISS BRADDON,

AUTHOR OF "HOSTAGES TO FORTUNE," "LADY AUDLEY'S SECRET," "STRANGERS AND PILGRIMS," "TAKEN AT THE FLOOD," "A STRANGE WORLD," ETC.

CHAPTER XXXVII.

BITTER ALMONDS.

FROM January to May is rather a lengthy period for a friendly visit; but although the hawthorns are flowering in Redcastle woods and May is nearly ended, Joel Pilgrim is still at Lancaster Lodge. He has taken up his abode there as if he meant to stay for the rest of his life, Sibyl thinks. She has grown tired of waiting to hear of his approaching departure. He talks about going, sometimes, but never definitely. He must go back to India before very long, he says, and Sibyl languishes for him to fix the date. He goes up to London on business now and then, but returns in a few days more insufferable than ever.

Sibyl has never hated any one as she detests this man. His presence makes life a burden to her. The luxurious tranquillity of her existence, the reposeful days, the pleasures of wealth,

A BEAR HUNT IN THE ROCKY MOUNTAINS.

are all poisoned by Mr. Pilgrim's company, and yet he treats her with the utmost politeness, with deference even, and obviously admires her to enthusiasm. This admiration is the most painful part of the business.

"If he only hated me as I hate him, we might get on very well together," thinks Sibyl; "but, as it is, the creature gives me the sensation of living in a glass case with a boa-constrictor."

Mr. Pilgrim does not enter Redcastle society, though the *élite* are quite ready to take him by the hand in the fullness of their love for Stephen Trenchard. Mr. Pilgrim is of a reserved temper, and prefers the tranquillity of Lancaster Lodge to the dwellings of strangers. He dines well, and drinks deeply after dinner, but the wine makes no more impression upon him than upon the decanters. Mr. Trenchard and he are often closeted together in business conference, but they never talk business before Sibyl. She has a vague idea that Mr. Pilgrim is a merchant, and that his house of business is in Calcutta, but she has no knowledge of his merchandise.

One day Mr. Trenchard complains to her, and with some bitterness, of her coolness to Joel Pilgrim.

"I think I have been kind enough to you to deserve that you should be civil to any friend of mine, Sibyl," he says, "and yet you are positively rude to Mr. Pilgrim."

"I am not intentionally so, Uncle Trenchard."

"Then your notion of good manners must be a very curious one. Nonsense, Sibyl; you can be winning enough, fascinating enough, when you please. Yet to this young man—"

"Young!" echoes Sibyl. "He must be five-and-thirty if he's a day."

"No matter, child; he is a young man to me. For him, I say—the son of my oldest friend—you have nothing but cold looks and insulting speeches. It is very hard upon me, Sibyl."

"My dear uncle, I did not know you were so fond of this Mr. Pilgrim. I have fancied sometimes that his visit was rather a trouble to you."

"I have been worried about his affairs now and then. The man himself is very dear to me."

"Then I will try to be more polite to him, my dear uncle, for your sake."

"I want you to try something more than that, Sibyl. You discouraged Sir Wilford Candonnel's attentions, for some inscrutable reason of your own—don't deny it, girl; you must have discouraged him, for I know he was over head and ears in love with you—and now he only makes a formal call once in six weeks. You might have had the first position in this part of the world if you had chosen, but you did not so choose. I saw you fling away your chance, and I did not reproach you. But now I come to something that touches me closer. Joel, the only son of my"—he pauses, with a curious smile—"only friend, Joel Pilgrim, a man of strong brain and strong feelings, has fallen in love with you. Not a butterfly passion like Sir Wilford's, mind you, to be blown aside by a breath of yours, but an enduring love. Now I have set my heart on seeing Joel and you man and wife."

"Why should you be so anxious to see me married, Uncle Trenchard? You wanted me to marry Sir Wilford, and now you want me to marry this Mr. Pilgrim, with Indian blood in his veins."

"I wanted you to marry Sir Wilford, because he could give you a great position. I want you to marry Joel, because Joel is dear to me, and to see you two united would be to secure the happiness of the only two people I love."

"Don't be angry with me, Uncle Trenchard, but I had as soon you told me a serpent loved me as this Mr. Pilgrim."

She feels that in speaking thus frankly she runs the risk of offending her uncle. For once in her life she is truthful. Her uncle is less angry than she had expected.

"Nonsense, child," he says, carelessly. "You are full of prejudice. You must learn to think better of my friend's son."

"Is he the son of that friend whose death distressed you so much, uncle?" asks Sibyl.

"What death? When?"

"One evening last summer, when you read the announcement in the paper."

Mr. Trenchard looks at her curiously for a moment.

"Yes, yes," he says; "that was the man."

From this time Joel Pilgrim is more open in his attentions. He follows Sibyl like her shadow, rides with her, drives with her, walks in the garden, plays billiards with her, stands beside the piano when she plays or sings, reads the books she reads, associates himself with every hour of her day and every pursuit of her life. She knows not what it is to be alone. She takes the utmost pains, in a quiet way, to let Mr. Pilgrim see that his attentions are odious to her. She never favors him with an encouraging look or word, yet he pursues his course doggedly, like a man who comes from a land where women's opinions and inclinations go for nothing.

People in Redcastle are not slow to talk of Mr. Pilgrim just as they talked of Sir Wilford Candonnel. It is now evident to the mind of Redcastle that Sir Wilford has cooled and fallen off in his attentions, and that this Anglo-Indian, with his dark face and sleek hair—a real Hindoo, perhaps, some people suggest—is to be Miss Faunthorpe's husband.

"They wouldn't go out riding together if it wasn't a settled thing," says Mrs. Groshen to Mrs. Stormont; "and in *my* day it was not considered correct for a young lady to go out alone with her engaged husband. But young ladies are changed."

"It's money, I suppose," remarks Mrs. Stormont, thinking of the main question and not of details. "I have no doubt this Calcutta merchant is immensely rich, and Mr. Trenchard wishes to unite the two fortunes. I thought Sibyl looked very unhappy the last time I called. If she had been allowed to follow her own inclinations, things would have taken a very different turn. I don't think she ever had such a genuine liking for any one as for my Fred."

"She didn't show it much in her manner," says Mrs. Groshen, smiling amiably.

"She is not a girl to let every one read her feelings," retorts Mrs. Stormont. "What is that some one says in a play about wearing one's heart outside one's dress? She's not that sort of girl. But I know she liked Fred. I sincerely pity her, poor child!"

The Stormonts see less of Mr. Trenchard and his niece after Joel Pilgrim's advent. This strange guest of the old man's, who will not go out visiting, even to the best people in Redcastle, seems a stumbling-block to social intercourse. Mr. Trenchard has also taken to refusing invitations, and Sibyl is dull and spiritless, and is even losing her beauty, Mrs. Groshen remarks, with a touch of triumph.

"Those brilliant complexions go off so soon," she says. "I'll tell you what it is, my dear, you may depend upon it that things are not quite right at Lancaster Lodge. There's something underhand going on there."

"But what?" inquires Mrs. Stormont, bursting with curiosity, for the solemnity of her friend's countenance implies a spirit that has penetrated Mr. Trenchard's secrets.

"I don't know what," replies Mrs. Groshen, in the most disappointing way; "but I have an instinct that tells me there is something wrong."

"There is an atmosphere of gloom in the house, I admit. I feel sure that girl is being forced into a distasteful engagement."

So gossips Redcastle, and not altogether without foundation, for the gloom deepens in Stephen Trenchard's house—a gloom which is not to be enlivened by upholsterer's work in the way of gilding and crimson taboret, or by luxurious dinners served on porcelain and silver, or by fine raiment, or any of the things that Stephen Trenchard's money or credit can buy.

If it were not for one wicked hope, Sibyl would assuredly fly the hateful abode that holds Joel Pilgrim, but that evil hope nerves her to remain.

Mr. Trenchard has been showing signs of rapid decay. The east winds of March and April have withered him. Dr. Mitsand talks less confidently of his patient's fine constitution, and urges extreme care. He expatiates on the perils of our treacherous climate, and suggests that Mr. Trenchard shall spend next winter in the south of France.

Stephen Trenchard has grown nervous and fretful. He complains of sleepless nights, and his failing appetite is obvious to all his household. Do not these signs betoken the beginning of the end?

"I will stay," Sibyl says to herself, and she fancies there is something almost heroic in the resolution. "However loathsome that man makes himself, I will wait for the end. Perhaps his passion for me is only a pretense, after all—a trap to catch me. If he can prove me disobedient, or force me to run away, he may induce my uncle to alter his will, and leave *him* every thing. That may be his plan—a deep-laid plot to ruin me."

Robert Faunthorpe dines with his rich brother-in-law about once in six months, a purely ceremonial visit, which is irksome to both men, though Uncle Stephen is very civil, and Uncle Robert enjoys the unwonted gratification of an excellent dinner and rare old wine. On the occasion of his last visit, near the end of April, Dr. Faunthorpe sees so marked a change in his brother-in-law that he goes home full of it, and tells Marion that he does not think her uncle is long for this world.

"What a shame!" says Marion, meaning Sibyl's conduct, and not her uncle's decline; "and here have I been estranged from him all the days of his life. It's a hard thing to be plotted out of one's expectations by a designing sister."

"My love, we have no reason to suppose that Mr. Trenchard will act unjustly in the matter of his will," remonstrates the mild little parish doctor.

"Oh dear no! he has acted so very justly all along; never put Sibyl over my head, never dropped me after taking me up! Oh, of course not!"

To satire so subtle as this Dr. Faunthorpe finds no reply. He only sighs gently, and comforts himself with a pinch of snuff.

Sibyl spends more time at the parish doctor's house just now than she has been used to do. It is the only place where Joel Pilgrim does not accompany her, and on this account it seems to her a haven of refuge. She is more amiable to Marion than of old, more friendly to Hester, more affectionate to Jenny. She feels happier —or at least more at peace—in the shabby old parlor, or the shabbier surgery, than any where else.

Jenny, enlightened by Alexis, knows her sister's secret, and is therefore a person to be conciliated. She has sworn eternal fidelity, however, and has never given so much as a hint of the truth to Marion.

It is a comfort to Sibyl in this time of trouble to lay her weary head on Jenny's substantial shoulder and talk hopefully of the days to come, when she and Alexis are to be reunited.

"He threatened never to forgive me," says Sibyl, "but I don't think he will keep his word."

"I'm sure he won't if you do your hair the new way," answers Jenny, with conviction. "It makes you look lovely."

On Sibyl's next visit Marion is full of Mr. Trenchard's declining health, and talks about his death as if it were a settled business, appointed to come off within a given time.

"You will be grand, Sibyl. Shall you keep Lancaster Lodge and the carriages? If I were you I should let the house furnished and go on the Continent. Traveling is so delightful, and if you wanted a companion you might take one of your sisters."

"How can you talk so horridly, Marion?" exclaims Sibyl. "Who says Uncle Trenchard is going to die?"

"Uncle Robert says he's not going to live long, and I suppose that's pretty much the same thing, only a nicer way of putting it. Uncle Robert ought to know, as a doctor. He generally knows about the parish patients. When he says they're going to get better, they don't always do it; but when he says they're going to die, they always bear him out. He's very lucky in *that*."

"You are the most dreadful girl, Marion."

"Well, you needn't color up and look pleased. That's quite as bad as talking horridly. I've a franker disposition than you, and I say things straight out. I suppose he'll leave Jenny and me something for mourning, out of respect to himself. I shall have a corded black silk, thick enough to stand alone. I always looked my best in black."

"Did Uncle Robert think that Uncle Stephen looked very ill when he dined with us the other day?" asks Sibyl, thoughtfully.

"Of course he did, or he wouldn't have said it. We say what we mean at this end of the town. They're more polite above Bar, and the more they say a thing the less they mean it. Mrs. Stormont told me she had taken a tremendous fancy to me when she thought I was Uncle Stephen's favorite."

"Don't be so bitter, Marion."

"If you had to have your boots soled and heeled twice over by a clumsy country cobbler you'd be bitter," replies the injured Marion.

Finding this young lady's temper inclining to acidity, Sibyl slips away to Jenny's favorite retreat—the surgery—where she finds the damsel seated on the hearth-rug busy at needle-work, and performing wonders in the way of stocking darning.

Sibyl flings herself into Dr. Faunthorpe's easy-chair, in a despondent attitude, and sits there in moody silence, much to Jenny's discomfiture.

"You might say 'how d'ye do' to one," she remonstrates.

"I beg your pardon, Jenny. It was mere absence of mind."

"Oh, that's what you call absence of mind above Bar. Hereabouts we call it rudeness."

"Don't be cross, Jenny. I'm very unhappy."

"I thought so," replies Jane, astutely. "You've come to see us so much oftener than you used to do—a sure sign that you are miserable. Are you unhappy about *him?*"

"About whom?"

"Oh, you know; my brother-in-law."

"Partly about him, and partly for other reasons. I am worried to death!"

"But Uncle Trenchard will die soon," says Jenny, cheerily, "and then all will come right. We shall go into mourning, and be great swells."

"Jenny, you really mustn't talk so."

"What's the harm?"

"You mustn't talk of poor Uncle Stephen's death as if it were an event we were all looking forward to."

"But we are," replies Jenny. "I'm sure Marion does nothing but talk about her mourning, and how she'll have it made. I'm sick hearing of corded silks and para—what's its name?—and bugled fringe. I sha'n't have bugled fringe; it catches in every thing, and one can't help scrunching the bugles. It's too great a temptation."

"Uncle Trenchard is weak and ailing, but he may live for years."

"No he mayn't. Not if Uncle Robert knows his business. He says he doesn't think Uncle Trenchard will last the summer out. And then we shall come in for any thing he has left us. Won't that be jolly! I'd rather he didn't die till the end of the summer. The dusty roads would so spoil our mourning."

"Jane, you are a perfect ghoul."

"Oh, it's all very well for you to be grand and indifferent! You've had the use of his money all along. We are looking forward to coming into a small slice of it. If I'm not made a ward in Chancery, and my money all tied up, we'll have hot suppers every night."

"Do stop that senseless chatter. Where does Uncle Robert keep the laudanum? I've a racking toothache."

"That's why you look so miserable, I suppose. All the poisons are on that top shelf," and Jenny points to that topmost shelf in the darkest corner of the surgery, on which Alexis espied the blue bottle labeled prussic acid.

If Jenny were not so deeply engaged with the complicated dilapidations of her stocking she would clamber upon the doctor's step-ladder and bring down the laudanum, but she goes on with her darning, and leaves Sibyl to get the bottle from its dusty repository.

Sibyl ascends the step-ladder, and descends again with a bottle in her hand, takes an empty vial from a drawer, and pours some of the fluid from the larger bottle into it dextrously and quickly.

"What a smell of bitter almonds!" cries Jenny. "You've got the wrong bottle. That's prussic acid."

Quickly, as she starts to her feet, Sibyl has reascended the ladder, and replaced the blue bottle in its corner before she can reach her.

"It's all right, Jenny. I know laudanum from prussic acid. What a fidgety, officious child you are!"

"I never knew laudanum to smell like bitter almonds," remonstrates Jenny, unconvinced. "Show me the bottle you put in your pocket."

"I shall do nothing of the kind. Go on with your work, and don't be ridiculous."

Jenny mounts the ladder and examines the shelf that holds Dr. Faunthorpe's small collection of poisons. The laudanum and the prussic acid are in bottles of the same color, but the prussic acid is inverted in a gallipot. Each is in its usual place, but Jane's quick eye perceives that while the laudanum bottle has its coating of dust undisturbed, the dust has been rubbed off the neck of the prussic acid bottle.

"I hope you're not doing any thing dreadful, Sibyl," she remarks, solemnly. "Tampering with poison is a dangerous thing."

"I have only taken a few drops of laudanum for my toothache."

"Well, I suppose I ought to believe you, as you're my elder sister. But I can't understand that smell of bitter almonds."

"All your fancy, I assure you, Jenny. And now let's be good friends and have a nice talk. Don't try to mend those holes. I will buy you some new stockings the next time I go to Carmichael's."

"You're a dear!" exclaims the volatile Jenny, forgetting all about that odor of bitter almonds.

The sisters seat themselves side by side in the window-seat and talk of the future, Sibyl's future, which means reunion with Alexis. They will be rich, happy. Jenny is to live with them, and have a pony to ride.

"And shall we have hot suppers?" inquires Jenny.

"What a vulgar child you are! Of course not. We shall dine at eight."

"That's rather the same thing under another name," says Jenny.

[TO BE CONTINUED.]

THE PRESIDENT AND THE SCHOOL QUESTION.

THE school question, which is agitating all other Western nations, is about to enter into the political discussions of our own. It has become the ruling topic in the politics of many lands. Men now more than ever before naturally divide themselves into the friends and foes of knowledge; the President's suggestions and Mr. BLAINE's motion will probably have the effect of drawing the line of distinction among us with unprecedented clearness. Already in the chief European countries, within a few years, the struggle of the people for knowledge, schools, and popular instruction forms the most noted trait of the times, and the result of their efforts to learn is usually a plain indication of the future fate of their nation. Those that win knowledge are powerful; those that have failed sink into weakness and despair. Five years ago England adopted a school law not unlike that suggested by President GRANT. It was compulsory, it was general, but it was divided into two branches, one of which was unsectarian, one under the control of the churches. The opposition of the Tories, the High-Church faction, and the Roman Catholics was at length overcome, the enemies of knowledge yielded to a compromise, and from the year 1870 England has been sedulously educating its people. An extraordinary progress has followed. The free and unsectarian branch of the scheme is rapidly supplanting the sectarian side, we are told by Mr. FORSTER, the author of the law; costly public schools have sprung up in London and in every part of England, the voluntary schools are dying out, and the American system of free education is advocated by men so conservative as Earl RUSSELL and so liberal as Sir CHARLES REED.

After her defeat, while a republic under THIERS, France, too, essayed to establish a system of compulsory education, but the clerical faction interfered, and the violent DUPANLOUP succeeded in closing the avenues of knowledge. In France every school-teacher is the servant of the priest and every school-house a papal chapel; and it was discovered recently, with a sentiment of horror by the clericals, that copies of a famous radical journal of Paris had been widely circulated by the Republicans among the teachers of the primary schools. Nearly half the French people, therefore, are brutal and savage. In Spain the republic introduced common schools; the priests destroyed them. Italy and Austria have thrown off the clerical yoke, and are educating their people; and wherever the papal power has fallen, the common school springs up in its place. But it may be asked why it is desirable to so amend our Constitution as to permit the national government to enforce an unsectarian system of education over the whole country; and the reply is that it is a plain necessity. The State governments at the South have failed to teach their people, and in some instances even labor to prevent their learning the simpler elements of knowledge. The Republicans established common schools in Georgia and Texas; the Democrats, when they came into power, like the French or Spanish priests, overthrew them. Four millions of uneducated citizens rule the politics of the Southern States, or are led by violence or fraud. No part of France is as uncultivated as Alabama; no region of Spain is more in want of knowledge than vast counties and districts of Mississippi. Whites and blacks live in a common degradation; yet to suffer them to remain so may bring shame and ruin upon all sections of the land. It is plain that a free government must have the right to require that all its people shall be educated.

But a still stronger argument exists at the North for the provision of a national safeguard for the common schools, since the same clerical faction which has so fatally assailed the course of education in France and Spain, and which has declared its ceaseless hostility to the American system of public instruction, has entered into our politics as a united body, and demands through its bishops and editors the appropriation of the

public funds to the maintenance of its own sectarian schools. Said the London *Tablet*, November 27, 1875, of Mr. FORSTER'S declaration in favor of secular education, "He has committed himself to a sort of education which no Catholic can accept, and from which every Catholic must guard his children at any cost." This is the conviction of every Roman Catholic priest, from the Pope to the begging friar, and it is against this unchanging enmity that we are to guard the public schools. In many States the papal party has already immense strength. It governs the Democratic leaders; it tells them that if they refuse to obey its suggestions, it will brand them with an ineffaceable mark "that every Catholic will know." Few Democrats today would be in office in any Northern State except for the papal support. It is by the aid of corrupt politicians that the papal priests may at last rule over our common schools, as they have ruled, to their degradation or ruin, those of France and Spain. It would seem, therefore, an impulse of natural prudence to guard against such an attempt by a constitutional provision forbidding forever all sectarian interference with the course of education.

How this can best be done will be the proper study of all the people. They must watch themselves over the welfare of their children and save them from harm. The President and Mr. BLAINE have both brought the subject before the nation, and it would seem to be only the natural completion of our free institutions to enforce over all the land a republican system of education. "Preach, my dear Sir," wrote JEFFERSON to WYTHE, in 1785, "a crusade against ignorance."

One conspicuous trait of the educational contest is the satisfaction with which the President's brief words at Des Moines and his more explicit Message have been received by the progressive party in other lands. In England they are said to have aroused an extraordinary interest. "Never," says the correspondent of the *Watchman and Reflector*, "has any utterance from human lips been sounded forth and emphasized with greater enthusiasm by every rank and class from the highest to the lowest of a great nation. As an item of news it reached my ears in the talk of a group of plain men near a railroad station." And in England it is probable that the next session of Parliament will witness a renewal of the attack upon popular education which was faintly intimated in the last. The Tory newspapers already suggest that the "voluntary" or denominational schools have never received a sufficient share of the school funds, and must be maintained by new grants. The Roman Catholics naturally join with the Tories. The people of England, proud of their new education, are alarmed for its safety. It is quite certain that if it had the power, the ruling faction would close every unsectarian school-house, and drive all the children within the fold of the Established Church. Germany, Italy, and France will hear with equal interest the bold words from America; and if ever the spirit of freedom shall invade and possess the Old World, it must be in the form of education. Our government from the beginning was a "crusade against ignorance." It must yet fulfill its appointed task. Nor can there be any doubt of the result. The labors and triumphs of a century have shown of what it is capable. The enemies of knowledge will find no lasting rest in the land of JEFFERSON, WASHINGTON, or ADAMS, and the bells that rang in the centennial year have heralded a fresh career of progress for free schools, free speech, and popular equality.

EUGENE LAWRENCE.

CHARLES DICKENS ON BELLS.

As for Dickens's marriage bells, he can marry none of his characters without a great deal of ringing. Mark how he insists on the bells being excellent company. Mr. Pickwick's excited reveries on the night of the discovery of the famous Bill-Stumpian sculpture are dissipated by the church bell "sounding solemnly on his ear; but when the bell ceased, the silence was insupportable—he felt almost as if he had lost a companion." "They were company to Toby Veck: many kind things they said to him." To the best of my belief, he has only made fun of the moral effect of bells and their associations once, viz., in Nicholas Nickleby's explanation of the part to be performed in a new play by Mr. Lenville, the heavy tragedian of Crummles's company: "But just as you are raising the pistol to your head, a bell strikes ten; you pause, you recollect to have heard a bell strike ten in your infancy; the pistol falls from your hand, you are overcome, burst into tears, and become a virtuous character ever afterward."

In his travels abroad he still displays his bell worship. At Marseilles he notices the jail bell and the bells on the draught horses; at Venice, "the softened ringing of the church bells;" at Genoa, "the long strings of patient mules that go jingling their little bells through the narrow streets;" "the gay vetturino jingling through every village;" the festa days, "when the bells of churches ring incessantly, not in peals, but in a horrible, irregular, jerking dingle, dingle, dingle, with a sudden stop at every fifteenth dingle or so, which is maddening." Rome seems to him "a vast wilderness of tinkling bells, from the bell that announces the elevation of the Host in St. Peter's, and the bell that gives the signal on Easter-Monday for the simultaneous illumination of the great cathedral, to the bell which puts the carnival out like a breath." At Florence he remarks the bell of the beautiful Campanile, "that summons the Compagnia della Misericordia to their charitable labors;" and as he returns homeward he hears the bells of Calais, and describes the night steamer which restores him to his native land as "a screech, a bell, and two red eyes." Arriving in London, like Arthur Clennam (in *Little Dorrit*), "maddening church bells of all degrees of dissonance, sharp and flat, cracked and clear, fast and slow, made the brick and mortar echoes hideous. In every thoroughfare, up almost every alley and down almost every turning, some doleful bell was throbbing, jerking, tolling, as if the plague were in the city and the dead-carts were going round. Mr. Arthur Clennam sat in the window of the coffee-house on Ludgate Hill, counting one of the neighboring bells, making sentences and burdens of songs out of it, in spite of himself, and wondering how many sick people it might be the death of in the course of the year. As the hour approached, its changes of measure made it more and more exasperating. At the quarter, it went off into a condition of deadly-lively importunity, urging the populace in a voluble manner to 'Come to church, come to church, come to church!' At the ten minutes it became aware" (like the "disappointed bell" tolled by the sexton in *Dombey and Son*) "that the congregation would be scanty, and slowly hammered out, in low spirits, 'They *won't* come, they *won't* come, they *won't* come!' At the five minutes it abandoned hope, and shook every house in the neighborhood for three hundred seconds, with one dismal swing per second, as a groan of despair." In short, London represented to Dickens not so much the metropolis of the world as the capital of chimes, inhabited not by so many million human creatures, but by innumerable bells. He takes an interest even in bell-ringers—mysterious mouldy men, of a somewhat ghoulish character from their association with church-yards, and always shabby, like "the whity-brown man whose clothes were once black, a man with flue on him and cobweb," and "the shabby little sexton who rang the church bell, like the bull in 'Cock Robin,' with his foot in the stirrup." He lovingly lingers in musty old belfries, "where the rules and fines of the ringers are painted in rhyme upon the walls." He is great on beadles, like him of Eatanswill, "ringing an enormous bell, performing concertos on it, and fantasias by way of commanding silence among the uproarious electors of that immaculate borough;" on the towncrier sent round with a bell to announce the opening of Crummles's theatre; on the "Golden Dustman" (in *Our Mutual Friend*), "clad in red plush velveteens, fan-tail hat, and hand-bell;" on "the scarlet postman and his bell;" on the chimney-sweep's bell; on the muffin boys' bells (to abolish which the public meeting is called in *Nicholas Nickleby*); on the bells on Jip's Chinese pagoda—many of which bells, alas! are obsolete; peripatetic bells, which have been swept away by ruthless police acts, or have died a natural death, like those of which Charles Lamb asks, "What is gone with the cages with the climbing squirrel and bells to them, which were formerly the indispensable appendages to the outside of a tinman's shop?" Gone, like the passing-bell, the pancake bell, the thief and riever's bell, morris bells, All-hallowtide, Good-Friday, St. Catherine's Eve bells, bell corn, bell courses, and bell prizes.

RELIGIOUS INTELLIGENCE.

Calendar.

JANUARY, 1876.

Sunday,	16.	—Second Sunday after Epiphany
Sunday,	23.	—Third Sunday after Epiphany.
Tuesday,	25.	—Conversion of St. Paul.
Sunday,	30.	—Fourth Sunday after Epiphany.

FEBRUARY.

Wednesday,	2.	—Purification B. V. M.
Sunday,	6.	—Fifth Sunday after Epiphany.
Sunday,	13.	—Septuagesima.
Sunday,	20.	—Sexagesima.
Thursday,	24.	—St. Matthias.
Sunday,	27.	—Quinquagesima.

THE REV. HENRY BOEHM, the patriarch of Methodist ministers, died at the home of his granddaughter near Richmond, Staten Island, on Tuesday, December 28. He had reached the ripe age of one hundred years, having completed his century of life on the 8th of June, 1875. By birth he was a Pennsylvania German, and his father before him was a minister, though not originally among the Methodists. Father BOEHM, as he was familiarly called, was licensed to preach in 1800. For many years he traveled on large circuits and still larger districts, preaching often in the wilderness, and co-operating with the hardy itinerants of that period in organizing and building up churches. His chief distinction, however, next to his great age, has grown out of the fact that he was the traveling companion of Bishop ASBURY, the founder, as far as any one man could be, of the Methodist Episcopal Church. The growing infirmities of the bishop made it important that during his yearly journeys from Maine to Georgia he should be accompanied by some watchful friend. For this duty Mr. BOEHM'S modesty and amiability perfectly fitted him. The two journeyed together during five of the last years of ASBURY'S life. At times the bishop was so much enfeebled by disease that his companion carried him in his arms from carriage to pulpit, and back again.

Father BOEHM showed during his later years very few of the infirmities of old age. His placid temper never forsook him. He was habitually cheerful, and lived every day in the sunshine. He had an old-fashioned courtesy which became him well, was neat in his person, and alive to the importance of current events. He preached occasionally to the end of his life, and his latest sermons, though very brief, were distinguished for their clearness and exceeding good sense. On the completion of his hundredth year a reception was tendered him in the York Street Church, Jersey City, by his friends, which was a most memorable occasion.

The first week of January will be observed by evangelical Christians throughout the world as a time of special prayer. The topics of prayer have been announced, as usual, by the Evangelical Alliance. The Seventh-day Adventists of this country have, however, appointed the 1st of January as a day of fasting and humiliation among their people.

The last Presbyterian General Assembly adopted a very effective method of securing the materials for a history of the Church, in connection with the celebration of the completed century of American independence. Each pastor is requested, on the first Sunday of July, 1876, to preach a discourse on the history of his church, and take up a collection for the purpose of erecting a fire-proof building for, and also endowing, the Presbyterian Historical Society. The discourses, after delivery, are to be deposited in the Historical building. The Rev. J. G. CRAIGHEAD, formerly one of the editors of the *Evangelist*, of this city, has been appointed secretary of the society, and will devote himself to the carrying forward of the Assembly's comprehensive scheme.

The *Watchman and Reflector*, of Boston, tells the following story: "At Oka, Canada, there is a very large Catholic church. About three years ago a neat little Protestant chapel, capable of seating 350, was built for the Indians of the village with funds contributed from abroad, the site having been purchased of an Indian woman, who had undisputed possession of it over sixty years. The Indians all became Protestants, and crowded the little chapel for worship, leaving the big Catholic church nearly empty. The priest, representing the Seminary of St. Sulpice, with millions of money, hunted up an old claim for the land on which the chapel stood, got judgment in its favor, and, when the Indians were away hunting or at work, employed some French Canadians to tear down the chapel and carry the material to his own premises for fire-wood." Comment on this performance is unnecessary; as a specimen of bigotry it speaks for itself.

A telegram from Montreal states that the Protestant Defense Association have employed counsel to prosecute the parties concerned in this outrage.

In Toronto, Canada, which has now 60,000 inhabitants, the Baptists have six churches. Early in December one of the congregations moved into a new building, which has been put up at a cost of $97,000 in gold. The Rev. Dr. BURROWS, of Louisville, and the Rev. JOHN PEDDIE, of Philadelphia, preached the sermons.

The 4th of January next has been fixed by Lord PENZANCE as the time for the hearing of the first case under the new Public Worship Regulation Act. The incumbent complained of is the Rev. C. J. RIDSDALE, of St. Peter's, Folkestone. The practices alleged are, "wearing illegal vestments, using lighted candles on the communion table when not required for the purpose of giving light, illegal processions, mixing water with the sacramental wine, the use of wafer bread, and adopting the eastward position." There will now be a full opportunity to test the legality of each and all of these practices.

Messrs. WHITTLE and BLISS are now holding union meetings in the Milwaukee Academy of Music. The Rev. E. P. HAMMOND has closed his services at Harrisburg, Pennsylvania, which continued four weeks. Union revival services are still kept up at Cleveland, Ohio. The Rev. A. B. EARLE has closed his meetings at Troy, New York, and returned to his home in Newton, Massachusetts; on the last day a reception was given him, when the city pastors expressed their obligations to the evangelist for the aid he had rendered them. Messrs. MOODY and SANKEY still draw thousands of hearers to their dépôt church in Philadelphia; excursion trains have been arranged, which bring in visitors from all the surrounding country.

The Rev. G. H. YOUNG preached lately a sermon in the Unitarian church of Troy, New York, in which he advocated the taxation of all church property. He estimated its value in the whole United States to be $832,000,000, and claimed that it had quadrupled between the years 1850 and 1870, while the number of church members had only doubled. The objection that churches benefit the neighborhoods in which they stand he met by claiming that as much could be said for many other public buildings.

Father HENNING, of St. Louis, does not hesitate to teach Catholics their political duties in the very plainest fashion. He has nothing to conceal. The Iowa Falls *Sentinel* reports him as speaking recently in this wise: "It is the duty of every Catholic to vote for a Catholic candidate; for one who is not opposed to the Catholic religion, who is not an enemy to the Church; and it is the duty of every faithful Catholic to vote against those candidates who are enemies of our Church and our holy faith.... The Church, we are bound to believe as Catholics, is infallible. She is infallible in faith; she is infallible in something more; she is infallible in every thing, in morals as well as in faith; and it follows that the state can never be absolutely separate from the Church; that the declaration of the independence of the state from the Church is simply political atheism. God has appointed the Church as His interpreter in morals; and as no state can exist without morality, no state can exist separate from the Church." This is the Catholic programme precisely.

Pittsburg is well provided with religious institutions. The Presbyterians have forty-four churches, the Methodists thirty-eight, the Episcopalians twenty-nine, and the Baptists ten in Pittsburg and Alleghany. According to a correspondent of the *Examiner and Chronicle*, Pittsburg is exceeded by Richmond, Virginia, which, with a population of 60,000, has fifty churches, and 24,828 church members. This makes one communicant for every two of the population. Nearly half of the church members are Baptists; of these 10,529 are colored.

The decline in the number of theological students in the universities of Prussia has become so great that it seriously affects the prospects of the evangelical Church. In 1831 there were in all of the universities 2208 theological students; in 1873 there were 740. In the Hessian universities of Marburg and Giessen there were, in 1831, 124 theological students; in 1873, 40. Of the students in theology who matriculated between 1831 and 1873 one-third abandoned theology before ordination. The reason given for this alarming decrease is the smallness of the stipends paid by the state to the ministers in charge of parishes.

The fair in aid of the Hebrew hospital of this city, which was held in December, closed with a total of $134,929 for gross receipts, or $110,000 after deducting expenses.

The note of the Hon. HAMILTON FISH, Secretary of State, to the secretaries of the American Board informs the country that five persons have been executed in Mexico for the murder of the Rev. JOHN L. STEPHENS, the American missionary, and that "the trial of other prisoners charged with participating in the mob was still pending." Mr. HUTCHINSON, now in Mexico, writes that 496 persons "have formally subscribed to our Christian belief, and are openly known as Protestants. Most of these conversions," he adds, "have been since the Acapulco trouble, and stand related to it."

The Presbyterian Synods of Albany, New York, Geneva, and Western New York have adopted a memorial praying the Legislature to repeal the "Gray Nuns Act." They object that the act "is purely sectarian, conferring upon the schools under the control of one religious sect rights and privileges not enjoyed or desired by any other sect; that it confers a virtual power upon a corporation outside of our educational system to provide teachers for that system, thus contravening the general act concerning public instruction." On Monday, December 27, the subject was brought before the Methodist preachers' meeting of this city, who are unanimous for the unconditional repeal of the obnoxious law. The precise language of the act sought to be repealed is as follows:

SECTION 1. Chapter 324 of the laws of 1871, entitled "An Act to incorporate the Sisterhood of Gray Nuns in the State of New York," passed April 6, 1871, is hereby amended by adding thereto as follows:

SEC. 1. The said corporation is hereby authorized to grant diplomas and honorary testimonials, in such form and under such regulations as its Board of Trustees may determine, to any person who shall have or may hereafter be graduated *at any seminary* of learning of said corporation located within the State; and *any such graduate* to whom a diploma may be awarded may file such diploma or a duplicate thereof in the Department of Public Instruction, and the Superintendent of Public Instruction may thereupon, *in his discretion*, issue a certificate to the effect that such graduate is *a qualified teacher* of the common schools of this State.

SEC. 2. This act shall take effect immediately.

HUMORS OF THE DAY.

"WILL you have it rare or well done?" said an Englishman to an Irishman, as he was cutting a slice of roast beef. "I love it well done iver since I am in this country," replied Pat, "for it was rare enough we used to ate it in Ireland."

A true picture of despair is a pig reaching through a hole in the fence to get a cabbage that lies a few inches beyond his reach.

BOYISH FREAK.—The other day a carpenter's son, aged six years, who had been left alone in his father's workshop, was disturbed while engaged in the painful operation of screwing up his eyes. He was immediately taken to a surgeon.

A sailor being asked how he liked his bride, replied, "Why, d'ye see, I took her for to be only half of me, as the parson says, but dash me if she isn't twice as much as I. I'm only a tar, but she is a Tartar."

"I never did see such a wind and such a storm," said a man in a coffee-room. "And pray, Sir," inquired a would-be wit, "since you saw the wind and the storm, what might their color be?" "The wind blew and the storm rose," was the ready rejoinder.

CURIOUS METAMORPHOSIS.—Wonders will never cease. The other day we heard that a horse was turned into a stable! And this is the boasted nineteenth century.

THE BATTLE OF LIFE.—Courtship is the engagement or siege, the proposal is the assault, and matrimony the victory.

A COCKNEY'S BLUNDER.—A country gentleman was strolling out with a cockney friend—a genuine cockney—when they finally approached a meadow in which was standing a glorious crop of hay. The cockney gazed at it wonderingly. It wasn't grass, it wasn't wheat, it wasn't turnip-tops. "Vy, vatever does you call this stuff?" said he to his companion. "That? why, hay, to be sure," was the reply. "Hay!" exclaimed he. "Come, that's cutting it a little too thick. If that's hay, just show me the hay-corns—come now!"

Coleridge, the poet and philosopher, once arriving at an inn, called out, "Waiter, do you dine here collectively or individually?" "Sir," replied the knight of the napkin, "we dines at six."

ANATOMICAL DISCOVERY.—For a long time it has baffled the medical authorities to account for the force with which the waves beat against the shore, and it has recently come to light that it arises from the fact of there being "muscles" in the sea.

A BACHELOR'S CHOICE.—"Oh, Mr. Grabbles," exclaimed a young mother, "shouldn't you like to have a family of rosy children about your knee?" "No, ma'am," said the disagreeable old bachelor; "I'd rather have a lot of yellow boys in my pocket."

A young man and a female once upon a time stopped at a country tavern. Their awkward appearance excited the attention of one of the family, who commenced a conversation with the female by inquiring how far she had traveled that day. "Traveled!" exclaimed the stranger, somewhat indignantly; "we didn't travel—we rid!"

Barnum was traveling once on board of one of the river steamers, where they feed you for a moderate outlay (seventy-five cents a meal) very sumptuously, but the portions supplied are usually of microscopic dimensions. He called at tea-time for a beefsteak. The negro brought him the usual little shriveled mite of broiled flesh, certainly not sufficient for more than two mouthfuls. Barnum poised the morsel on his fork, scanned it critically, as though it were a sample of steak submitted to his inspection, and then returned it to the waiter, saying, "Yes, that's what I mean. Bring me some of that."

"Billy, how did you lose your finger?" "Easy enough," said Billy. "I suppose you did—but how?" "I guess you'd 'a lost yourn if it had been where mine was." "That don't answer my question." "Well, if you must know," said Billy, "I had to cut it off, or else steal the trap."

An old lady, who had a great aversion to rye in any form, says that now they have got to making it into whisky, she can take a little now and then.

A VISIT TO A LI

A VISIT TO A LIGHT-HOUSE.

THERE is no surer test of the advancement in civilization of any maritime country than the attention that is paid to its light-houses. When we consider the amount of property constantly in danger of destruction upon the ocean, and the number of valuable lives at stake, it seems hardly possible to overestimate the importance of those guiding lights that supply, although in a most imperfect manner, the light of the sun when the latter has left the face of the waters to be covered with darkness. Light-houses are of the greatest antiquity, but they were long of an imperfect kind, and only in recent times have the systems of lighting them been perfected.

Our illustration on this page offers the reader a glimpse at the interior workings of the modern light-house, and suggests an idea of the labor and diligence required to keep the great structure in order, so that its warning signal shall never fail as a guide to the perplexed mariner. In the first two drawings the light-house of to-day is contrasted with the simple beacon light of ancient times. The latter is as old as history. It consisted of a rough tower of wood or stone, upon the summit of which a fire was built, which gave forth an uncertain and unsatisfactory light. The fuel was hoisted to the height by an ingenious contrivance of ropes, and it was the duty of a single attendant to keep the fire replenished during the night. The last of these beacons in existence was in Scotland, where a rude building for the purpose had been erected by unknown hands upon the Isle of May, at the entrance to the Firth of Forth. The third sketch in our engraving shows the laborious operation of cleaning the drift from the lantern. On a stormy night it is sometimes necessary that this should be done at least three or four times, and the men in charge of the light are compelled to mount the tower, and, holding on by the iron rings upon the frame-work, spend hours in removing the snow and sleet from the glass. In number four we see a party of visitors making the perilous ascent of the tower. Having landed at the base, it is only by the ascent of a formidable-looking copper ladder that the interior of the light-house can be reached. Ladies are sometimes brave enough to attempt it, but only in the mildest weather. What the difficulties attending even a landing upon the rocks are on rough days can be seen from the next sketch. At times, when the weather has been stormy, there will sometimes be several weeks during which it is impossible to hold any communication with the people living in the tower. Even when there is only what sailors call a "stiff breeze" blowing it is often dangerous to attempt the trip.

Number six shows the keeper of the light "on duty." From the time of lighting the lantern at sundown he takes his place in the little room devoted to his use, and there keeps a solitary watch which endures four hou[rs.] At
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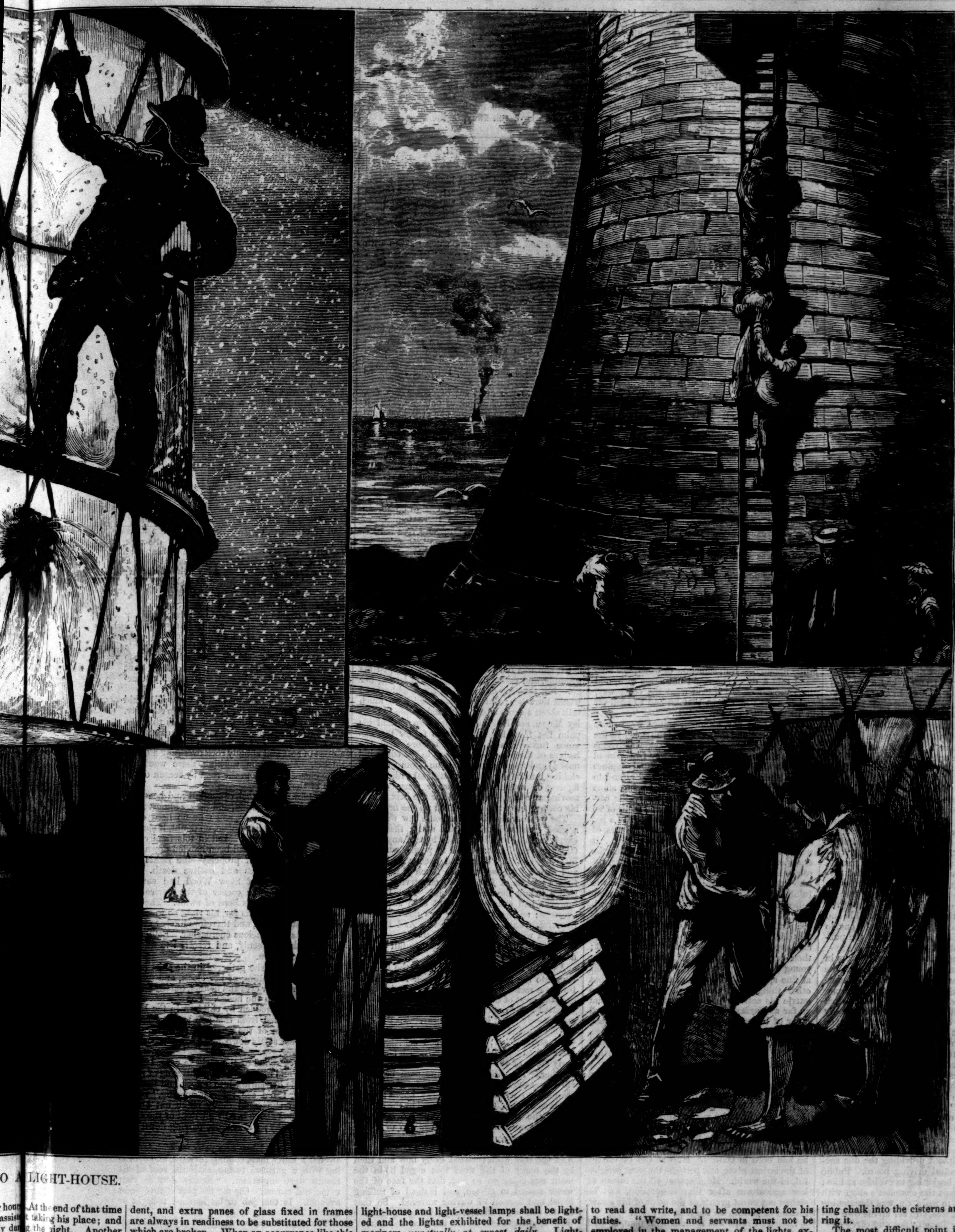

O A LIGHT-HOUSE.

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n the watch for such an acci-dent, and extra panes of glass fixed in frames are always in readiness to be substituted for those which are broken. When an occurrence like this takes place, a bell is rung, and assistant light-keepers, aroused from their slumbers, without waiting to dress themselves, will mount the stairs to assist in adjusting the "storm pane." In the last of the drawings we see an instance of this disaster.

There is a printed book of 152 pages specially devoted to "instructions and directions to light-keepers," and in this they receive explicit commands not only for their daily duties, but for all possible or imaginable accidents and emergencies. The first article of these instructions announces the fundamental duty of the light-keeper: "The light-house and light-vessel lamps shall be lighted and the lights exhibited for the benefit of mariners *punctually at sunset daily*. Light-house and light-vessel lights are to be kept burning brightly, free from smoke, and at their greatest attainable heights, *during each entire night* from sunset to sunrise." It is added that the height of the flame must be frequently measured during each watch at night by the scale, graduated by inches and tenths of an inch, with which keepers are provided. Finally, "All light-house and light-vessel lights shall be extinguished punctually at sunrise, and every thing be put in order for lighting in the evening by 10 A.M. daily."

A light-house keeper is required by our government to be over eighteen years old, to be able to read and write, and to be competent for his duties. "Women and servants must not be employed in the management of the lights, except by special authority of the department." The life is not an attractive one, for many of our light-houses, like that in the engraving, are situated on barren, desolate, and exposed points of the coast. Sometimes the keepers can not communicate at all with the shore during the winter months, and in such cases supplies of all kinds must be accumulated beforehand. The fresh-water for the use of the families living in the light-house must be caught in cisterns, and there is an official circular to light-keepers telling them how to avoid the poisonous effects of the water which drips from the leads of the roof by putting chalk into the cisterns and occasionally stirring it.

The most difficult point in the arrangement of the lights is to contrive some device by which the mariner will be enabled to distinguish one from another—a point which is often of as much importance as the brilliancy of the light itself. Various means have been tried. There are white and red lights, fixed, revolving, and flash lights, and the revolving lights have different intervals, from a minute and a half to ten seconds. There are also fixed white lights showing a red flash at intervals, and in some cases two and even three white lights mark a headland. But mistakes still occur, in spite of all precautions taken to avoid them. What fearful disasters can re-

sult from errors of this kind we learn from the terrible wreck of the unhappy *Deutschland*.

It is said that evil-minded persons on the Bahama Islands and elsewhere used systematically to hang out false lights to lure ships off their course and on to the reefs, and that their rude method of imitating a revolving or flash light was to tie a lantern to a horse's tail, and walk the animal around in a circle. In 1825 it was enacted that "if any person or persons shall hold out or show any false light or lights, or extinguish any true light, with the intention to bring any ship or vessel, boat or raft, being or sailing upon the sea, into danger, distress, or shipwreck, every such person so offending, his or her counselors, aiders, and abettors, shall be deemed guilty of felony, and shall, on conviction thereof, be punished by a fine not exceeding four thousand dollars, and imprisonment and confinement to hard labor not exceeding ten years, according to the aggravation of the offense." But even the severity of this law seems inadequate to the magnitude of the crime it is designed to guard against.

CRIPPS, THE CARRIER.*

By R. D. BLACKMORE,

Author of "The Maid of Sker," "Lorna Doone," "Alice Lorraine," etc., etc.

CHAPTER I.

THE HEAD OF THE FAMILY.

The little village of Beckley lies, or rather lay many years ago, in the quiet embrace of old Stow Wood, well known to every Oxford man who loves the horn or fusil. This wood or forest (now broken up into many straggling copses) spread in the olden time across the main breadth of the highland to the north of Headington, between the valley of the Cherwell and the bogs of Otmoor. Beckley itself, though once approached by the Roman road from Alchester, must for many a century have nursed its rural quietude, withdrawn as it was from the stage-wagon track from High Wycombe to Chipping Norton, through Wheatley, Islip, and Bletchingdon, and lying in a tangle of narrow lanes leading only to one another. So Beckley took that cheerful view of life which enabled the fox to disdain the blandishments of the vintage, and prided itself on its happy seclusion and untutored honesty.

But as all sons of Adam must have something or other to say to the rest, and especially to his daughters, this little village carried on some commerce with the outer world, and did it through a carrier.

The name of this excellent man was Cripps; and the carrier's mantle, or woolsey coat, had descended on this particular Cripps from many generations. All the Cripps family had a habit of adding largely to their number in every generation. In this they resembled most other families which have to fight the world, and therefore recruit their forces zealously; but in one great point they were very distinct—they agreed among one another. And ever since roads were made, or rather lanes began trying to make themselves, one great tradition had confirmed the dynasty of Crippses.

This was that the eldest son should take the carrying business; the second son (upon first avoidance) should have the baker's shop in Oxford over against old Baliol College; the third should have the queer old swine farm in the heart of Stow Forest; the fourth should be the butcher of Beckley; and the fifth its shoe-maker. If ever it pleased the Lord to proceed with the masculine fork of the family (as had happened several times), the sixth boy and the rest were expected to start on their travels, when big enough. As for the girls, the carrier being the head of the family, and holding the house and the stable and cart, was bound to take the maids, one by one, to and fro under his tilt twice a week, till the public fell in love with them.

Now so many things come cross and across in the countless ins and outs of life, that even the laws of the Crippses failed sometimes in some jot or tittle. Still, there they stuck, and strong cause was needed ere they could be departed from. Of course the side shoots of the family (shoe-makers' sons, and so on) were not to be bound by this great code, however ambitious to be so. To deal with such rovers is not our duty. Our privilege is to trace the strict succession of the Crippses, the deeds of the carrier now on the throne and his second best brother, the baker, with a little side peep at the man on the farm, and a shy desire to be very delicate to the last unmarried "female."

The present head of the family, Zachary Cripps, the Beckley carrier under the laws of time (which are even stricter than the Crippses' code), was crossing the ridge of manhood toward the western side of forty, without providing the due successor to the ancestral driving board. Public opinion was already beginning to exclaim at him; and the man who kept the chandler's shop, with a large small family to maintain, was threatening to make the most of this, and set up his own eldest son on the road, though "dot and carry one" was all he knew about the business. Zachary was not a likely man to be at all upset by this; but rather one of a tarrying order, as his name might indicate.

Truly intelligent families living round about the city of Oxford had, and even to this day have, a habit of naming their male babies after the books of the Bible, in their just canonical sequence, while infants of the better sex are baptized into the Apocrypha, or even the Epistles. So that Zachary should have been "Genesis;" only his father had suffered such pangs of mind at being cut down by the ever-strengthening curtness of British diction into "Jenny Cripps," that he laid his thumb to the New Testament when his first man-child was born to him, and finding a father in like case quite relieved of responsibility, took it for a good sign, and applied his name triumphantly.

But though the eldest born was thus transferred into the New Testament, the second son reverted to the proper dispensation; and the one who went into the baker's shop was Exodus, as he ought to be. The children of the former Exodus were turned out testamentarily, save those who were needed to carry the bread out, till their cousin's boys should be big enough.

All of these doings were right enough, and every body approved of them. Leviticus Cripps was the lord of the swine, and Numbers bore the cleaver, while Deuteronomy stuck to his last, when the public-house could spare him. There was only one more brother of the dominant generation, whose name was "Pentachook," for thus they pronounced the collective eponym, and he had been compendiously kicked abroad to seek his own fortune right early.

But as for the daughters (who took their names from the best women of the Apocrypha, and sat up successively under the tilt until they were disposed of), for the moment it is enough to say that all except one were now forth and settled. Some married farmers, some married tradesmen, one took a miller's eldest son, one had a gentleman more or less, but all with expectations. Only the youngest was still in the tilt, a very pretty girl called Esther.

All Beckley declared that Esther's heart had been touched by a college lad, who came some five years since to lodge with Zachary for the long vacation, and was waited on by this young girl, supposed to be then unripe for dreaming of the tender sentiment. That a girl of only fifteen summers should allow her thoughts to stray, contrary to all common-sense and her duty to her betters, for no other reason (to any body's knowledge) than that a young man ate and drank with less noise than the Crippses, and went on about the moonlight and the stars and the rubbishy things in the hedges—that a child like that should know no better than to mix what a gentleman said with his inner meaning—put it right or left, showed that something was amiss with her. However, the women would say no more until it was pulled out of them. To mix or meddle with the Crippses was like putting one's fingers into a steel-trap.

With female opinion in this condition, and eager to catch at any thing, Mrs. Exodus Cripps, in Oxford, was confined rather suddenly. She had kneaded a batch of two sacks of flour, to put it to rise for the morning, and her husband (who should not have let her do it) was smoking a pipe and exciting her. Nevertheless, it would not have harmed her (as both the doctor and the midwife said) if only she had kept herself from arguing while about it. But, somehow or other, her husband said a thing she could not agree with, and the strength of her reason went the other way, and it served him right that he had to rush off in his slippers to the night-bell.

On the next day, although things were quite brought round, and the world was the richer by the addition of another rational animal, Mr. Exodus sent up the crumpet-boy all the way from Broad Street in Oxford to Beckley to beg and implore Miss Esther Cripps to come down and attend to the caudle. And the crumpet-boy, being short of breath, became so full of power that the carrier scarcely knew what to do in the teeth of so urgent a message. For he had made quite a pet of his youngest sister, and the twenty years of age betwixt them stopped the gap of rivalry. It was getting quite late in the afternoon when the crumpet-boy knocked at the carrier's door, because he had met upon Magdalen Bridge a boy who owed him twopence: and eager as he was to fulfill his duty, a sense of justice to himself compelled him to do his best to get it. His knowledge of the world was increased by the failure of this Utopian vision, for the other boy offered to toss him "double or quits," and having no specie, borrowed poor Crumpy's last penny to do it; then being defeated in the issue, he cast the young baker's cap over the bridge, and made off at fine speed with his coin of the realm. What other thing could Crumpy do than attempt to outvie his activity? In a word, he chased him as far as Carfax, with well-winged feet and sad labor of lungs, but Mercury laughed at Astræa, and Crumpy had a very distant view of fivepence. Recording a highly vindictive vow, he scratched his bare head, and set forth again, being further from Beckley than at his first start.

It certainly was an unlucky thing that the day of the week should be Tuesday—Tuesday, the 19th of December, 1837. For Zachary always had to make his rounds on a Wednesday and a Saturday; and if he were to drive his poor old Dobbin into Oxford on a Tuesday evening, how could he get through his business to-morrow? For Dobbin insisted on a day in stable whenever he had been in Oxford. He was full of the air of the laziest place, and perhaps the most delightful, in the world. He despised all the horses of low agriculture after that inspiration, and he sighed out sweet grunts at the color of his straw, instead of getting up the next morning.

Zachary Cripps was a thoughtful man, as well as a very kind-hearted one. In the crown of his hat he always carried a monthly calendar gummed on card-board, and opposite almost every day he had dots, or round O's, or crosses. Each of these to his very steady mind meant something not to be neglected; and being (as time went) a pretty fair scholar—ere school boards destroyed true scholarship—with the help of his horse he could make out nearly every place he had to call at. So now he looked at the crumpet-boy to receive and absorb his excitement, and then he turned to young Esther, and let her speak first, as she always liked to do.

"Oh, please to go back quite as fast as you can," said Esther to the Crumpy, "and say that I shall be there before you, or, at any rate, as soon as you are. And, Crumpy, there ought to be something for you. Dear Zac, have you got twopence?"

"Not I," said the carrier; "and if I had, it would do him a deal more harm than good. Run away down the hill, my lad, and you come to me at the Golden Cross, perhaps as soon as Saturday, and I'll look in my bag for a half-penny. Run away, boy; run away, or the bogies will be after you."

CHAPTER II.

THE SWING OF THE PICKAXE.

The baker's boy felt that his luck was askew upon this day of his existence, for Carrier Cripps was vexed so much at this sudden demand for his sister that he never even thought of asking the boy to have a glass of home-brewed ale.

"Zac, what made you send the boy away?" Esther asked, when she came down stairs with her bonnet and short cloak on. "Of course I am very foolish; but he would have been some little company."

"There, now, I never thought of it! I am doiled a' do believe sometimes. Tramp with you to the Bar mysell, I wull. Sarve me right for a doin' of it."

"Indeed, then, you won't," she answered, firmly. "There's a hard day's work for you, Zac, to-morrow, with all the Christmas parcels, and your touch of rheumatics so bad last week."

"Why, bless the cheeld, I be as hearty as ever!"

"Of course you are, Zac; of course you are, and think naught of a sack of potatoes. But if you declare to come with me one step, backward is the only step I take."

"Well, well," said the carrier, glad on the whole to escape a long walk and keep conscience clear; "when you say a thing, Etty, what good is it? Round these here parts none would harm 'e. And none of they furriners be about just now."

"Good-night, Zac, good-night, dear," cried Esther, to shorten departure, for Cripps was a man of a slow turn of mind, and might go on for an hour or two; "I shall sleep there to-night, of course, and meet you at the Golden Cross to-morrow. When had I best be there?"

"Well, you know better than I do. It might be one o'clock, or it might be two, or it might be half past three a'most. All you have to do is this—to leave word at the bar with Sally Brown."

"I shall do nothing of the sort," she answered; "I don't like bars, and I don't like Miss Brown. I shall look in the yard for the cart, brother."

"You'll do pretty much as you like. That much a' may be cocksure of." But before he could finish his exposition of his sister's character, she was out of sight; and he dropped his grumble, and doubted his mind about letting her go. Not that any one at all of the neighborhood would hurt her; but that there had been much talk about a camp of dark-skinned people in Cowley Marsh not long ago. Therefore he laid his palm flat from his eyebrows, to follow the distance further; and seeing no more than the hedges of the lane (now growing in the cold wind naked) and the track of the lane (from wet mud slaking into light-colored crustiness) without any figures, or sound, or shadow, or sense of life moving any where—he made for the best side of his cottage door, and brightened up the fire-light.

The weather had been for some few weeks in a good constitutional English state; that is to say, it had no settled tendency toward any thing. Or, at any rate, so it seemed to people who took little heed of it. There had been a little rain, and then a little snow, and a touch of frost, and then a sample of fog, and so on: trying all varieties, to suit the British public. True Britons, however, had grumbled duly at each successive overture; so that the winter was now resolving henceforth only to please itself. And this determined will was in the wind, the air, and the earth itself, just when night began to fall on this dark day of December.

As Esther turned the corner from the Beckley lane into the road, the broad coach road to Oxford, she met a wind that knew its mind coming over the crest of Shotover—a stern east wind that whistled sadly over the brown and barren fields, and bitterly piped in the roadway. To the chill of this blast the sere oak leaves shivered in the dusk and rattled; the gray ash saplings bent their naked length to get away from it; and the surly stubs of the hedge went to and fro to one another. The slimy dips of the path began to rib themselves, like the fronds of fern, and to shrink into wrinkles and sinewy knobs; while the broader puddles, though skirred by the breeze, found the net-work of ice veiling over them. This as it crusted began to be capable of a consistent quivering, with a frail infinitude of spikelets, crossing, and yet carrying into one another. And the cold work (marred every now and then by the hurry of the wind that urged it) in the main was going on so fast, that the face of the water ceased to glisten, and instead of ruffling lifted, and instead of waving wavered. So that as the surface trembled, any level eye might see little splinters (held as are the ribs and harl of feathers) spreading and rising like stems of lace, and then with a smooth crisp jostle sinking, as the wind flew over them, into the quavering consistence of a coverlet of ice.

Esther Cripps took little heed of these things, or of any other in the matter of weather, except to say to herself now and then how bitter cold the wind was, and that she feared it would turn to snow, and how she longed to be sitting with a cup of "Aunt Exie's" caudle in the snug room next to the bakehouse, or how glad she would be to get only as far as the first house of St. Clement's, to see the lamps and the lights in the shops, and be quit of this dreary loneliness. For now it must be three market days since fearful rumors began to stir in several neighboring villages, which made even strong men discontent with solitude toward night-fall; and as for the women—just now poor Esther would rather not think of what they declared. It was all very well to pretend to doubt it, while hanging the clothes out or turning the mangle, but as for laughing out here in the dark, and a mile away from the nearest house— Good Lord! how that white owl frightened her!

Being a sensible and brave girl, she forced her mind as well as she could into another channel, and lifted the cover of the basket, in which she had some nice things for "Aunt Exie," and then she set off for a bold little run, until she was out of breath and trembling at the sound of her own light feet. For though all the Crippses were known to be of a firm and resolute fibre, who could expect a young maid like this to tramp on like a Roman sentinel?

And a lucky thing for her it was that she tried nothing of the sort, but glided along with her heart in her mouth and her short skirt tucked up round her. Lucky also for her that the ground (which she so little heeded, and so wanted to get over) was in that early stage of freezing, or of drying to forestall frost, in which it deadens sound as much as the later stage enlivens it. Otherwise it is doubtful whether she would have seen the Christmas dressing of the shops in Oxford.

For a little further on she came, without so much as a cow in the road or a sheep in a field for company, to a dark narrow place, where the way hung over the verge of a stony hollow, an ancient pit which had once been worked as part of the quarries of Headington. This had long been of bad repute as a haunted and ill-omened place; and even the carrier himself, strong and resolute as he was, felt no shame in whispering when he passed by in the moonlight. And the name of the place was the "gypsy's grave." Therefore, as Esther Cripps approached it, she was half inclined to wait and hide herself in a bush or gap until a cart or wagon should come down the hill behind her, or an honest dairy-man whistling softly to re-assure his shadow, or even a woman no braver than herself.

But neither any cart came near, nor any other kind of company, only the violence of the wind and the keen increase of the frost-bite. So that the girl made up her mind to put the best foot foremost, and run through her terrors at such a pace that none of them could lay hold of her.

Through yards of darkness she skimmed the ground, in haste only to be rid of it, without looking forward, or over her shoulders, or any where, when she could help it. And now she was ready to laugh at herself and her stupid fears, as she caught through the trees a glimpse of the lights of Oxford, down in the low land, scarcely more than a mile and a half away from her. In the joy of relief she was ready to jump and pant without fear of the echoes, when suddenly something caught her ears.

This was not a thing at first to be at all afraid of, but only just enough to rouse a little curiosity. It seemed to be nothing more or less than the steady stroke of a pickaxe. The sound came from the further corner of the deserted quarry, where a crest of soft and shingly rock overhung a briery thicket. Any person working there would be quite out of sight from the road by reason of the bend of the hollow.

The blow of the tool came dull and heavy on the dark and frosty wind, and Esther almost made up her mind to run on, and take no heed of it. And so she would have done, no doubt, if she had not been a Cripps girl. But in this family firm and settled opinions had been handed down concerning the rights of property—the rights that overcome all wrongs and outlive death. The brother Leviticus of Stow Wood had sown a piece of waste at the corner of the clevice with winter carrots for his herd of swine. The land being none of his thus far, his right so to treat it was not established, and therefore likely to be attacked by any rapacious encroacher. Esther felt all such things keenly, and resolved to find out what was going on.

To this intent she gathered in the skirt of her frock and the fulling of her cloak, and fending the twigs from her eyes and bonnet, quietly slipped through a gap in the hedge. For she knew that a steep track, trodden by children in the blackberry season, led from this gap to the deep and tangled bottom of the quarry. With care and fear she went softly down, and followed the curve of the hollow.

The heavy sound of the pickaxe ceased as she came near and nearer, and the muttering of rough voices made her shrink into a nook and listen.

"Tell 'e, I did see zummat moving," said a man whom she could dimly make out on the beetling ridge above her by the light of the clearing eastern sky; "a zummat moving down yonner, I tell 'e."

"No patience, I han't no patience with 'e," answered a taller man, coming forward, and speaking with a guttural twang, as if the roof of his mouth were imperfect. "Skeary Jem is your name and nature. Gie me the pick if thee beest aveared. Is this job to be finished to-night or not?"

The answer was only a growl or an oath, and the swing of the tool began again, while Esther's fright grew hot and thumped in her heart and made her throat swell. It was all she could do to keep quiet breath and prevent herself from screaming, for something told her that she was watching a darker crime than theft of roots or robbery of a sheep-fold.

In a short or a long time—she knew not which—as she still lay hid and dared not show her face above the gorse tuft, a sound of sliding and falling shale heavily shook her refuge. She drew herself closer, and prayed to the Lord, and clasped her hands before her eyes, and cowered, expecting to be killed at least. And then she peep-

ed forth to know what it was about. She never had harmed any mortal body; why should she be frightened so?

In the catch of the breath which comes when sudden courage makes gulp at uncertainty, she lifted herself by a stiff old root to know the very worst of it. Better almost to be killed and be done with than bear the heart-pang of this terrible fear. And there she saw a thing that struck her so aback with amazement that every timid sense was mute.

Whether the sky began to shed a hovering light, or the girl's own eyes spread and bred a power of vision from their nervous dilation—at any rate, she saw in the darkness what she had not seen till now. It was the body of a young woman (such a body as herself might be) lying, only with white things round it, in the black corner, with gravel and earth and pieces of rock rolling down on it. There was nothing to frighten a sensible person now that the worst was known perhaps. Every body must be buried at some time. Why should she be frightened so?

However, Esther Cripps fell faint, and lay in that state long enough for tons of burying rock to fall and secret buryers to depart.

[TO BE CONTINUED.]

SCIENTIFIC INTELLIGENCE.

AMONG the most beautiful objects in the way of natural curiosities is the now well-known *Euplectella*, or Venus's flower basket, a cylindrical net-work resembling the finest spun glass woven together in open meshes of wonderful regularity. The *Challenger*, during her exploration, visited the single locality whence this object is obtained, off the island of Mactan, adjacent to Zebu Island, not very far from Manila. The following account of the method of collecting it is given: "We had no sooner landed than we saw the sponges about every where, and we had no difficulty in getting a couple of fisherwomen on the following day to consent to guide us to the spot where they were found. The Indians came to us early in the morning, and we started with them in the steam-launch to the village, about six miles off, where they lived. There we took in two very curious and ingeniously contrived instruments, with which they bring the sponges up. Two long strips of bamboo meet at an angle of forty-five degrees, and are fixed in that position by an elaborate system of stays of bamboo, which are attached to a piece of wood which runs back from the angle between the two arms or wings of the machine. The piece of wood is weighted with stones, and a line is attached to it, so that the machine is pulled along on the bottom with the angle in advance and the two wings sloping backward, one on either side. The outer edge of each of the bamboo rods is armed with between thirty and forty large fish-hooks, with their barbs set forward toward the angle. The *regaderas*, as the Spaniards call them, are found at a depth of about one hundred fathoms. The Indian lets down the bamboo arrangement with a strong fine line of Manila hemp, and pulls it slowly over the ground. Every now and then he feels a slight tug, and at the end of an hour or so he pulls it in, with usually from five to ten *regaderas* entangled in the hooks. *Euplectella* has a very different appearance, under these circumstances, from the cones of glassy net-work in the British Museum. Its silver beard is clogged with the dark gray mud in which it lives, buried to about one-third of its height, and the net-work of the remainder of the tube is covered with a pall of yellowish fleshy matter, which gives it a heavier look and greatly diminishes its beauty. The layer of flesh is not so thick, however, as we expected, and only slightly masks the form of even the detailed sculpture of the sponge. It is not nearly so thick and spongy as it is in another species of the same genus which we dredged off the coast of Portugal."

The *American Naturalist*, which has been published for nine years at Salem, Massachusetts, under the direction of Messrs. PACKARD and PUTNAM, has lately passed into the hands of H. O. HOUGHTON & Co., and will be published at the Riverside Press, Cambridge, under the editorial management of Dr. A. S. PACKARD. It is announced that the amount of matter in each number will be increased, and that its typographical dress will be improved, as also the character and number of the illustrations. For Volume X., for 1876, a department of geography and travel is announced, and the proceedings of scientific societies will be reported.

The *Athenæum* of the 4th of December announces the death of Mr. R. C. CARRINGTON, well known as the proprietor of Redhill Observatory, and the author of the Redhill Catalogue of Circumpolar Stars, for which he received the gold medal of the Astronomical Society in 1859, and of observations of spots on the sun from November 9, 1853, to March 24, 1861. Illness and other causes led to the interruption of Mr. CARRINGTON's labors; but a few years since he established another observatory at Churt, near Farnham, and he was found dead at his residence there on the morning of November 1.

In a memoir by LUDICKE, he shows that the atmospheric pressure diminishes with the waxing and increases with the waning moon. The pressure is less at the perigee than at the apogee, and in general the effect of the moon upon the atmosphere is the inverse of that which it produces upon the ocean. The observations on which his results are based extend over eight years; but the actual effect of the moon upon the barometric pressure, although decided, is yet exceedingly small.

A correspondent of *Land and Water*, in reference to the proposed introduction of the turbot and sole from the coast of Europe to that of the United States, writes that Devonshire furnishes admirable opportunities for getting what is necessary for this purpose. He remarks that turbot, brill, sole, etc., can be had of all sizes from that of a two-shilling piece up to that of the hand. He has kept them alive for two days, although they lay for hours previously in the boat. They have been taken from the boat and transported in an open cart, and lived for several hours without water. He suggests that, as soles are very shy, they should be provided with plenty of sand, taken, if possible, from the water previously occupied by them. They should also be covered, as they are not fond of the light.

Considerable interest has been shown in the position taken by Lieutenant WEYPRECHT, the well-known arctic traveler, in reference to arctic exploration, his ground being that traveling expeditions have so nearly solved the purely geographical problem, and any remaining are so likely to be fully developed by the British expedition, that it is better to establish permanent stations in high latitudes, where full series of observations can be made, over a period of years, from which the laws of periodical phenomena can be determined. A combination of the two classes of effort will be desirable. Thus an expedition may erect observing stations at particular points, from which exploring journeys can be made, with the stations as a base. These expeditions can be by land on sledges, or by water in boats, and can be kept in communication with each other by suitable vessels passing between them.

These considerations have been fully presented by the German commission to which the subject was referred, with Lieutenant WEYPRECHT as a member, which also urges that a proper understanding be had between different nations for the systematic prosecution of this work, so that the labor of one party need not be duplicated by another. It is recommended that the region between the west coast of Greenland and the east coast of Spitzbergen be taken up by Germany for further investigation; and they also recommend that a number of stations be established on the east coast of Greenland, with secondary stations on Jan-Mayen Island and the west coast of Spitzbergen.

The death of Mr. F. E. EDWARDS is announced as having occurred on the 15th of October, at the age of seventy-six. Mr. EDWARDS was well known as the author of several valuable monographs on the different groups of the eocene mollusca, published by the Paleontological Society.

CLEMENT LEY, so well known by his investigations into the movements of storms, states, in reference to the movements of cirrus clouds, whose laws have been investigated by HILDEBRANDSSON and others, that his own observations fully confirm those of the latter as to the motions of the upper clouds, with only this modification, that the vertical axis of a revolving storm, about which the whole mass of air may be supposed to rotate, is not exactly vertical, but inclined backward—a conclusion to which he is led by the study of some thousands of observations, and which he had provisionally announced several years ago. In general, therefore, it may be stated that above every storm area, or region of low pressure toward which the lower clouds move, there exists in the upper atmosphere a system of winds blowing outward in all directions, the centre from which the upper currents move being somewhat behind the centre of the lower system of winds.

As the results of the more important experiments in France as to the efficiency of the sulpho-carbonates as a remedy against the phylloxera, it is stated that wherever a solution of the salts or their vapors penetrated, this grape-vine louse was destroyed, and the vine was not injured, but rather improved in its vegetation. If some few phylloxeras were met with alive after the treatment of the plant, they were probably young and agile larvæ from untreated parts or from eggs hid in fissures of the stem or ground.

The great problem now, according to Professor DUMAS, is to reduce the price of the sulpho-carbonates, especially that of potassium; and another question is how to apply the substance.

According to Mr. JOHN YOUNG, the sandstone bottoms of iron furnaces assume, from the long-continued action of heat, a distinctly columnar form, the old lines of stratification being obliterated, thus showing that heat, as well as electricity and mechanical force, was an agent in the production of the columnar form of rocks.

A recent novelty in medical treatment consists of the hypodermical injections of pure or distilled water in cases of rheumatic or other local pain. They are to be applied immediately over the part affected, in quantities of not less than two grams, the maximum being ten or twelve grams. They are said to be almost always serviceable, and never at all injurious.

A French physician announces that distressing or excessive palpitation of the heart can almost always be arrested by bending double, the head down and the arms hanging, so as to produce a temporary congestion of the upper portion of the body. In nearly every instance of nervous or anemic palpitation the heart immediately resumes its natural function. If the movements of respiration are arrested during this action, the effect is still more rapid.

The *Geographical Magazine* for December contains an interesting account of the work accomplished by STANLEY's African explorations, having special reference to the survey of the Nyanza Lake, which proves to be of even greater extent than has been supposed by many geographers.

It is well known that since the exhaustion of the stock of plumbago in the celebrated Borrowdale mines in Cumberland, England, lead-pencils have not been as good as formerly, the substitutes being deficient in many of the qualities of the English material. It is stated that recent examinations of an extensive character have brought to light the existence of new seams in the old mine, and that a company has been formed to work them. It is confidently believed that before long this mine will become as celebrated as ever.

The Dutch Geographical Society is contemplating the fitting out of a Sumatra expedition, with the intention, should this enterprise be successful, of turning its attention to arctic exploration.

It has long been known that oleander leaves contain an active poison, which was first examined by LUKOWSKI in 1861. This body, oleandrin, has lately been re-investigated by BETTELLI, who obtained it in an imperfectly crystalline condition. It is pale yellow, soluble in water, alcohol, ether, chloroform, fusel-oil, and olive-oil. At 56° C. it softens, becomes a greenish liquid at about 70°, and at 170° it undergoes partial decomposition. BETTELLI also succeeded in forming the chlorhydrate of the alkaloid.

Professor COPE has published an important paper on the *Batrachia* and *Reptilia* of Costa Rica, with notes on the reptiles of Nicaragua and Peru, in the quarto journal of the Philadelphia Academy of Natural Sciences. Most of the Costa Rican materials were obtained from the researches of Dr. WILLIAM M. GABB, who was engaged for several years in exploring that country in behalf of the Costa Rican government, by which he has added very largely to our knowledge of the geography, geology, general natural history, and ethnology of the region. He has already published many papers in all these departments, and it is to him we owe our only reliable information in regard to the Costa Rican aborigines. The first series of all the collections made by Dr. GABB have all been presented by him to the National Museum, in Washington, and they constitute a highly valued portion of the extensive collections of the establishment.

Other collections used by Professor COPE in this memoir are those of Dr. VAN PATTEN and Mr. C. N. RIOTTI, these covering the region extending from the Atlantic to the Pacific. Eighty-nine species were furnished by Professor GABB, of which thirty-seven were new to science. The total number of species known from all investigators in Costa Rica is 132, and it is probable that a large number yet remain to be discovered, showing that the region is rich in terrestrial cold-blooded vertebrates.

HOME AND FOREIGN GOSSIP.

WITH the month of December, 1875, the New York City Mission completed the forty-ninth year of its charitable operations. There are thirty city missionaries employed by this society, five mission chapels have been established and maintained, three churches have been organized on a simple union basis, and four Sabbath-schools are maintained for the most destitute children. The work of the society also embraces meetings for street girls, reading-rooms and lodging-houses for the friendless, as well as many other means for aiding and benefiting the poor and needy. The City Mission chapels are De Witt Chapel, No. 135 Greenwich Street; Calvary Chapel, No. 153 Worth Street; Lebanon Chapel, No. 70 Columbia Street; Carmel Chapel, No. 134 Bowery; Olivet Chapel, No. 63 Second Street. At the head-quarters of the City Mission, No. 50 Bible House, a list of missionaries, mission stations, and visitors of the poor may always be found. It is often a convenience to the benevolent who may be unable to render personal assistance to the needy to know where to send them for aid. A homeless young girl may be directed to the Girls' Lodging-house, No. 27 St. Mark's Place, or to the Protectory, No. 41 Seventh Avenue, corner of Thirteenth Street. A friendless boy, who would like a good place in country or city, may find assistance at the Children's Aid Society, No. 19 East Fourth Street, or the Juvenile Asylum, No. 61 West Thirteenth Street. Persons looking for employment may be sent to the Free Labor Bureau, No. 10 Clinton Place. A decent sober man, without money, may find a night's lodging at the Helping Hand for Men, No. 316 Water Street. The beggar and vagrant should be directed to No. 66 Third Avenue, corner of Eleventh Street, that they may find admission to the public institutions under the care of the Commissioners of Charities. There are more than twenty dispensaries scattered over the city, where medical advice or attendance can be obtained in cases of sickness among the poor. There are, of course, numerous other societies for the relief of suffering and want, but we believe these few brief directions will be acceptable to many of our readers, who are often at a loss to know where to direct those who may be needing aid.

On the 29th of November the president of the Pennsylvania Railroad Company submitted a proposition to the Mayor of Philadelphia to erect a bridge over the Schuylkill River at Market Street, where the old structure which was destroyed by fire formerly stood. The proposition was accepted on the understanding that the bridge was to be completed before January 1, 1876. On December 24 the bridge, having been practically completed, was thrown open to the public, its construction having occupied about twenty-one days from the time the Mayor signed the ordinance authorizing it.

According to recent statements, ten steamers and 1500 lives have been lost on the Pacific coast within the past few years. The loss of the steamer *Pacific* has aroused much public feeling in Victoria and in San Francisco. Many persons vigorously denounce the system which has permitted ships to go to sea in an unsound condition, poorly provided with means of saving life, and with unreliable, undisciplined crews, largely composed of Chinese.

Hazing at Union College has been punished by the suspension of all the parties engaged in the business, some seven or eight students.

A short time ago three freight-cars containing $6,000,000 worth of silk-worm eggs arrived in New York from San Francisco. This unusual cargo had come from Hong-Kong, and was bound to Italy and the South of France. It might have reached its destination more quickly and at less cost by way of the Suez Canal; but it has been found useless to ship them that way, because the Southern climate hatches the eggs. When the eggs reach their European destination they will be stored in vaults, secure against warmth, until the foliage of the mulberry-trees, on which the silk-worm feeds, is grown.

Among the many incidents which have reached us in connection with the loss of the *Deutschland* is a pleasant one about a cheery German named Hermann, who succeeded in saving a young American lady. He took her up the rigging and held her there all through the dreadful night, and says she was as brave and as self-possessed as if they had been comfortably on shore. Some time during the night an unknown friend passed down to him a bottle of whisky. The cork was in the bottle, and as he was holding on to the rigging with one hand and had the other round the lady, there was some difficulty in getting at the contents of the bottle. This he finally accomplished by knocking the neck off, and then found himself in the dilemma of not being able to get the bottle to the lady's mouth. "You are pouring it down my neck," was her quiet response to his first attempt; but in the end he succeeded in aiming the whisky in the right direction, and after taking some himself, passed it on, feeling much refreshed. A terrible accident occurred, which threatened death to them. The purser, who had fixed himself in the rigging some yards above them, getting numbed, loosed his hold, and falling headlong down, struck against the lady and bounded off into the sea. But Hermann kept his hold, and the shock was scarcely noticed. On such a night all the obligations were not, as Hermann gratefully acknowledges, on the one side; for when one of his feet became numbed, his companion, following his direction, stamped on it till circulation was restored. From their perilous post, with waves occasionally dashing up and blinding them with spray, they witnessed some terrible scenes below.

About two weeks ago a pond of water in North Alabama suddenly disappeared with a loud, rumbling sound, to the great dismay of a couple of gentlemen who were standing on its banks preparing to shoot ducks. A large hole is all that remains to mark the spot where was the runaway pond.

Occasionally there *is* a lady who is not ashamed to state her age. The one we have now in mind is Mrs. Mary Schnebly, of Hagerstown, Maryland. She is one hundred and three years old, bright and active, and intends to go to the Centennial. Nobody has a better right to go there, surely.

A gigantic bridge is about to be constructed across the St. Lawrence River at Montreal. Its total length will be over 11,000 feet, including the viaducts approaching the river and crossing the island. It will consist of fifty-seven spans, and will be 130 feet above the level of the river.

It is strange what weak, silly, and contemptible prejudices are carried even to the grave. Last September the managers of Mount Moriah Cemetery, in Philadelphia, refused to receive the body of Henry Jones, a noted colored caterer, for burial. It seems that a lot had long before been purchased by Jones, and improved to the amount of two or three thousand dollars; but the managers had not allowed the purchase deed to be recorded when they learned that Jones was a colored man. So when the widow brought an action, the managers held that the sale was not valid, because not recorded. The Court of Common Pleas decided in favor of the plaintiff; but the matter will be carried to the Supreme Court, because it is believed that "the knowledge that a colored person is interred in the cemetery will deter others from buying lots, and thus depreciate the value of the property!"

The grain of bird's-eye walnut frequently forms curious outlines, which by a little stretch of the imagination can be made to appear like real animals or inanimate objects. On the panel of a desk in the Merchants' Exchange, in San Francisco, the grain in the wood, which is bird's-eye walnut, bears a close resemblance to a chaotic sea of flame, in the midst of which a shaggy head appears. The features are those of a middle-aged man, and bear a look of despair.

The Princess Louise—so say the English papers—is absorbed in her art studies all day long. She is a most accomplished needle-woman, not only in copying, but in designing. At a glance she can tell Florentine lace from Venetian, Spanish from Belgian—nay, can name the century it was made in and the possible district from whence it comes. The cunningest old Jew dealer has no chance of passing off an imitation upon her, for her quick eye tells before her hand touches the sham, and she can teach him much more about the matter than he knows himself. As to tapestries, the princess is learned not alone in designs, but in colors, in threads, in silks, in dyes, and in all the details of reproduction, not one feature of which escapes her eye.

Twenty-five cents' worth of turnip seeds has caused half a dozen years of litigation and an expense of many thousand dollars. About six years ago a gentleman of New Jersey claimed damages from a firm for selling him seed which was represented to be a variety which would produce early turnips. The seed cost twenty-five cents. The turnips proved to be a late variety, and of very poor quality. The purchaser brought a suit, and recovered $99 in a justice's court. The defendants, on the ground that no fraud was intended, took the case on appeal to the Court of Common Pleas, where the decision of the lower court was affirmed. The defendants were still dissatisfied with the opinion, and took the case on certiorari to the Supreme Court, which two years ago gave a decision sustaining the lower courts. The case was next heard of in the Court of Errors and Appeals, where a decision was rendered at the last term in favor of the plaintiff. The cause has excited considerable interest among lawyers.

The second trial of the English "big gun"—otherwise called the 81-ton gun—which took place recently in the presence of a distinguished and scientific company, was a complete success. The experiments were under the direction of the Committee of Explosives and the various officers of the Royal Arsenal. There were six rounds fired, the last being with 240 pounds of two-inch powder, with a 1247-pound shot, and recorded a velocity in the instrument-room of 1513 feet per second, and a pressure of twenty-three tons.

During the last fiscal year the whole amount of coin manufactured at the mints of the United States was 39,191,778 pieces, having the value of $43,854,708. The cost of making this coinage was $889,370.

At a recent meeting of the Cincinnati Medical Society a paper was read giving the observations of Dr. W. B. Davis on revaccination during the present epidemic in Cincinnati. His observations were based on 200 private cases of revaccination and 600 cases in the work-house. His conclusions were as follows:

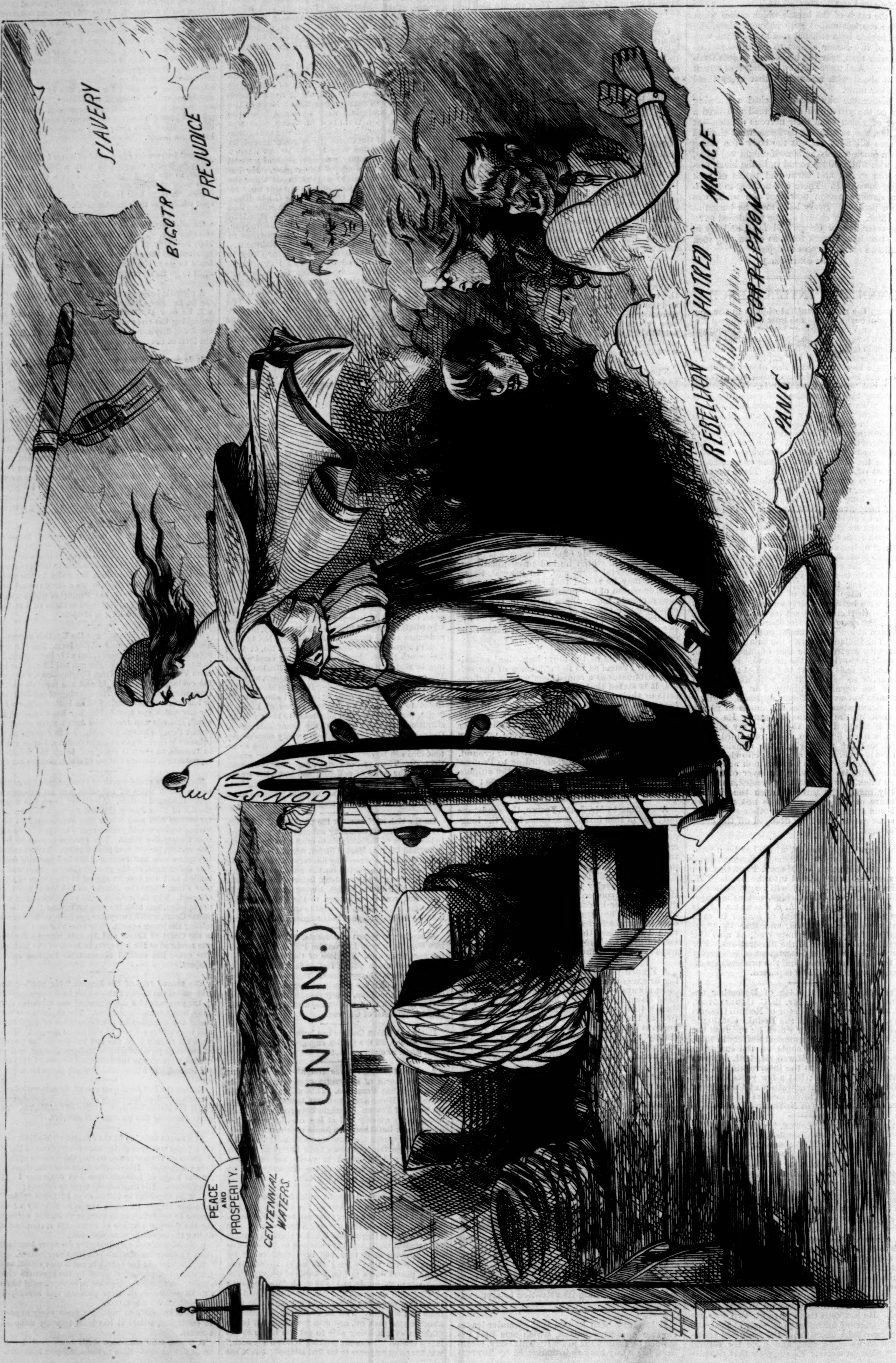
1. That exposure to infection and intense epidemic influence largely increases the susceptibility of the system to the influence of vaccine virus, and accounts for the unusual number of successful revaccinations during the existence of an epidemic.

2. Small-pox and varioloid give no more immunity from a recurrence of small-pox than vaccination.

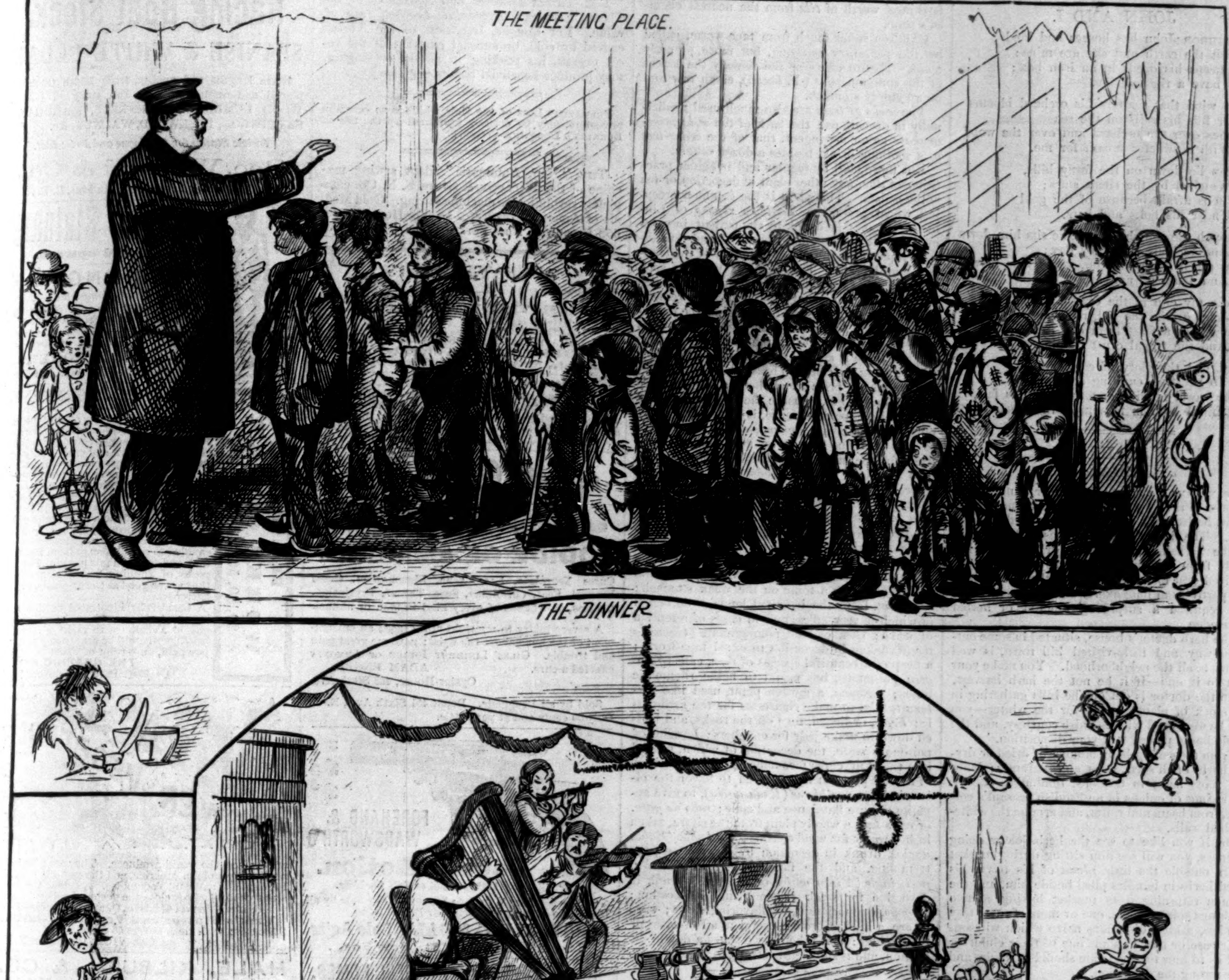
3. The cicatrix (or mark) is not a safe criterion of the degree of protection given by the previous vaccination. A number of persons were vaccinated having pits of small-pox on their persons, and seventy-five per cent. of the cases took.

4. It is advisable to vaccinate upon every exposure to contagion, unless it has been recently done with success.

5. Those who are successfully revaccinated are to some extent susceptible to the small-pox influence.



COLUMBIA. "WE HAVE HAD A STORMY PASSAGE, BUT I GUESS WE ARE ALL RIGHT NOW."



CHRISTMAS DINNER TO THE NEWSBOYS AND NEWSGIRLS OF NEW YORK.

A CHRISTMAS DINNER.

MR. JAMES GORDON BENNETT, of the *Herald*, did a most kindly and generous act on last Christmas-day, by giving to the newsboys and newsgirls of this city, some twelve hundred in number, without distinction in regard to the journals vended by them, an excellent dinner at MOQUIN'S restaurant, in Ann Street. The urchins were divided into squads of about 200 each, admitted at different hours according to the color of their tickets, and were served with a plentiful meal of roast turkey, potatoes, French rolls, cakes, oranges, and coffee. Twenty waiters, under the immediate direction of Mr. MOQUIN, and Mr. WILLIAM E. HALL, business manager of the *Evening Telegram*, attended to the wants of the juveniles, a street band of Italian harpists and violinists the while enlivening the proceedings with popular melodies. It was in every sense of the word an unceremonious banquet. Immediately upon taking their seats, every boy, as if moved by a single impulse, ate the dessert first, pocketed the oranges and apples, and sometimes attempted to lay violent hands on the delicacies of his immediate neighbor.

When the meal was finished at all the tables by the successive batches of children, each child was allowed to draw from a bag a lottery ticket, and the lucky ones who drew prizes were furnished with an order for a suit of clothes. The little people, as may well be imagined, were in high spirits. They cheered the generous provider of the feast, and sang the "Mulligan Guards," "Down in a Coal Mine," the "Red, White, and Blue," and other popular songs, with the expression and feeling peculiar to New York *gamins*. The room was tastefully decorated with Christmas greens.

That the boys and girls enjoyed themselves to the utmost may be seen by the illustrations of our artist, Mr. WOOLF, in which the pathos and the humors of the scenes in and about the restaurant are depicted in his most happy manner.

JOHN AND I.

NEIGHBOR John has houses and lands;
 But the earth and sky are mine:
He keeps his deeds in an iron box;
 I have a right divine.

The wind that scatters his orchard blooms
 Or fills his sails on the sea
Comes over the orchard and over the wood
 With a sweeter breath for me.

I can lie down on the ferny hills,
 Watched by the silent stars;
John is afraid because of the gold
 Under his bolts and bars.

Though the sun shines out, he sits him down
 And reckons it day by day;
But green leaves beckon, wild winds blow,
 And I am up and away.

I dip my cup in the crystal spring,
 John drinks the red, red wine;
He sits at a feast from day to day,
 And the frugal crust is mine.

But, oh! the glory of earth and sky
 To my free, exulting soul!
The world is wide and the world is fair,
 And I hold in fee-simple the whole.

SPANISH HERBS AND HERBALISTS.

SPANIARDS are great believers—and not merely those of the lower class—in the virtues of the native herbs of their country or immediate district. The doctor's office is constantly usurped by the herbalist, a wise man or woman, who, partly from natural talent, partly from having received oral instruction from father or mother, and partly from long exercise of the healing art, has acquired a surprising amount of herbal knowledge.

The herb doctor's house, situated in some out-of-the-way and little-visited hill town, is well known to all the neighborhood. You make your visit to it, and—if it be not the herb harvest, when the doctor is out on the hills gathering in his stock of plants to dry for the winter—you will be welcomed with Spanish courtesy, and the whole house placed "at your disposition."

From the ceiling hang bundles of dried or drying herbs of all sorts, sizes, and perfumes; bulbs and roots hang in festoons, reminding one of the strings of onions in an English peasant's cottage, from beam and rafter, and around the white-washed walls.

Or, if you like to see the herb doctor doing business, you will see him sitting during market hours outside the little *plaza* of his town, his dried herbs in bundles piled beside him, and the women returning from market buying, at two farthings apiece or less, one or more of these tiny bundles, asking directions as to which will suit their case or that of some one of their children, and as to how the medicine should be made, and how strong the decoction.

The herbalist very often can not read or write; his or her knowledge is confined to the one craft, like that of the old wives who deal in *simples.* Yet the cures wrought by these people in cases of fever, colic, rheumatism, ague, want of appetite, and the like, are very great, and, being veritable, can not be laughed down.

The distinguishing feature of the Spanish herbs and flowers and shrubs is their intensely *aromatic* nature, with a certain amount of *bitterness.*

The leading diseases among the poor are colics, wind spasms, and tertian or low fevers (*calenturas*).

Here, then, we find that nature, as the Spanish poor themselves say, has placed the remedy beside the disease to which it is the antidote. The bitter of quinine cures, we know, many forms of low fever; the aromatic pungency of ginger cures colics and flatulence. So here we have bitter for fevers, aromatic and pungent herbs for colics.

Foremost among Spanish herbs comes the *yerba* (or herb) called *Yerba luisa.* This is a garden plant, the *lemon-verbena* of our garden. Among us the lady plucks a sprig and scents her hand with it; so does the Spanish lady; but she knows well its value, and treasures and dries for winter use every leaf of it. Its value is here well known as the finest cordial and stomachic in the world. It can be taken in two ways, either made into a decoction, with hot water and sugar, and drank cold as a *refresco* and tonic; or, better still, with the morning and evening cup of tea, thus: put a sprig of lemon-verbena—say, five or six leaves—into the tea-cup and pour the tea upon it; you will never suffer from flatulence, never be made nervous and old-maidish, never have cholera, diarrhœa, or loss of appetite. Besides, the flavor is simply delicious. No one who has once drank their Pekoe *with* will ever again drink it without a sprig of lemon-verbena.

Some remedies—nay, many—are common property, common to the regular and irregular practitioner.

Such are the *Flores cordiales,* of which every *bótica,* or apothecary's shop, has a store. These cordial flowers consist of the *oroyuz,* or licorice stick, called by the poor *palo dulce,* the *Y. altéa,* and the leaves and flowers of the common scented *violet.* The three are dried, mixed up together, and invariably prescribed by Spanish practitioners for ladies suffering from a slight cold or oppression on the chest. The decoction must be drunk lukewarm.

Such, again, is the *tila,* or dried buds, flowers, and fruit of the *lime* or *linden tree.* Marvelous is the amount of this used as tea. The decoction is taken either hot or cold, and is said to be a sovereign cure for all slight affections of the nerves. Are you low-spirited, nervous, or suffering from a sudden shock or fright?—be sure any Spanish woman passing by will bring you two farthings' worth of *tila* from the nearest chemist's shop.

Children suffer much from tape-worm, called by the peasantry *solitaria,* but more properly *tenia.* Nature offers as the remedy the leaves of the common *mint* (*Y. buena*), eaten raw and on an empty stomach.

The *barks of trees* are also much used medicinally in decoctions; the bark of the *wild pomegranate* as an astringent, that of the *cedar-tree* as a soothing drink, besides a dozen others.

But more used by regular and irregular practitioners than any other plant in decoction or tea is the *grama.* This plant is the common creeping wheat grass, the *Triticum repens* of Linnæus. It may be drunk by the patient, in cases of fever, all the day, and is cooling and refreshing; it promotes the proper functions of the bladder and bowels. This plant is used in such quantities that carts are laden with it. Needless is it to say that it is marvelously cheap, a remedy within the reach of all. Many drink the decoction (cold and sweetened with sugar) as a *refresco* instead of water during the summer months.

Then there is *wild rosemary* (*Romero macho*), which, being the common brush-wood of the hills, commands no price at all here, a decoction of which is used, hot, to bathe the limbs in cases of rheumatism; or, in essence, is put, a few drops only, into the coarse *aguardiente* of the country to give it a fine flavor; or may be used as a wash for the hair, although a Spanish woman's halo of glory seldom needs such stimulants. There is the *captosera,* or universal specific for colic and diarrhœa; *jolivarda* and *brusco,* the uses of which are best left unmentioned; *manzanilla,* or *wild camomile,* good for giving appetite and curing the pains of limb after fevers; *cantahueso,* a sort of large thyme, a decoction of which will stanch a flow of blood from a stab or cut, or act as a tonic on the weak stomach; *cane root,* from the irrigated lands, a decoction of which is very efficacious in cases of retention of urine; bark of wild pomegranate (*Granada agria*), taken in decoction to expel tape-worm; a heap of a beautiful species of *fern,* called *falagera,* poisonous, but useful to bathe rheumatic limbs; *veronica,* a garden plant, used like *Datura tatula,* to make cigarettes for the asthmatic; *lichis,* or lichen, torn off the rocks, and boiled down to make jelly for coughers; bundles of poisonous *mata,* the decoction of which, rubbed into the skin, cures face-ache; *pibrella,* an herb of a very pungent aroma used to flavor the olives in brine; *wild rue* (*Ruda agria*), to give appetite or cure flatulence and colic; *rabo de gato,* or *cat's-tail,* a woolly plant from the sierra, taken in hot water for wind spasms; *wild sage* (*Sabia agria*), drunk in decoction by the nervous, the trembling, and the fanciful; *Yerba doncella,* *periwinkle* (*Vinca major* of Linnæus), drunk in decoction for weak stomach and indigestion; *oregono,* or marjoram, for flavoring stews; *vara de oro,* a kind of broom, useful in all diseases of the bladder; it is taken three times a day in decoction, and is sufficiently strong to expel a stone.

From the N. Y. Tribune.

A WANT SUPPLIED.

THE American mind is active. It has given us books of fiction for the sentimentalist, learned books for the scholar and professional student, but *few books for the people.* A book *for the people* must relate to a subject of universal interest. Such a subject is the physical man, and such a book "THE PEOPLE'S COMMON-SENSE MEDICAL ADVISER," a copy of which has been recently laid on our table. The high professional attainments of its author—Dr. R. V. PIERCE, of Buffalo, N. Y.—and the advantages derived by him from an extensive practice, would alone insure for his work a cordial reception. But these are not the merits for which it claims our attention. The author is *a man of the people.* He sympathizes with them in all their afflictions, efforts, and attainments. He perceives their want—*a knowledge of themselves*—and believing that all truth should be made as universal as God's own sunlight, from his fund of learning and experience he has produced a work in which he gives them the benefits of his labors. In it he considers man in every phase of his existence, from the moment he emerges "from a rayless atom, too diminutive for the sight, until he gradually evolves to the maturity of those *Conscious Powers,* the exercise of which furnishes subjective evidence of our immortality." Proceeding upon the theory that every fact of mind has a physical antecedent, he has given an admirable treatise on Cerebral physiology, and shown the bearings of the facts thus established upon individual and social welfare. The author believes, with Spencer, that "as vigorous health and its accompanying high spirits are larger elements of happiness than any other things whatever, the teaching how to maintain them is a teaching that yields to no other whatever," and accordingly has introduced an extensive discussion of the methods by which we may preserve the integrity of the system and oftimes prevent the onset of disease. Domestic Remedies—their preparation, uses, and effects—form a prominent feature of the work. The hygienic treatment, or nursing of the sick, is an important subject, and receives attention commensurate with its importance. Nearly all diseases "to which flesh is heir" are described, their symptoms and causes explained, and proper domestic treatment suggested. To reciprocate the many favors bestowed upon him by a generous public, the author offers his book at a price ($1 50) little exceeding the cost of publication. Our readers can obtain this practical and valuable work by addressing the author.—[*Com.*]

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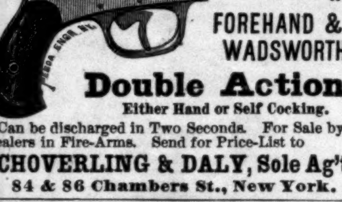

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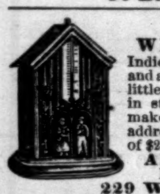

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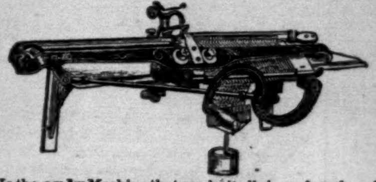

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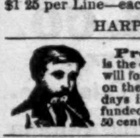

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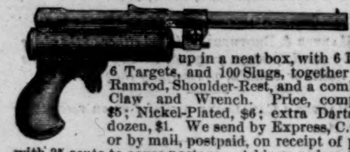

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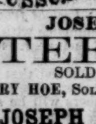

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"PLAYING THE GUITAR."—[FROM THE PICTURE BY FRANCESCA PERALTA.]

"PLAYING THE GUITAR."

THE guitar, a stringed instrument chiefly used to accompany the voice in singing, is of great antiquity. It is probably of Eastern origin, having been known to the Egyptians, in a form somewhat similar to that in present use, for more than fifteen centuries before the Christian era. The Moors gave it to Spain, whence its use soon extended to Italy and other European countries. Its lightness, the ease with which it was carried, and its peculiar qualities of tone made it the favorite instrument with serenading lovers, especially in Italy and Spain. It was at one time in considerable repute in France and England as a solo instrument, but its limited capacity brought it into disfavor in the concert-room; and as serenading has fallen out of fashion even in Southern Europe, the guitar is now chiefly prized by ladies as a delicate-toned instrument of accompaniment to their own voices. To hold it gracefully is an accomplishment carefully cultivated among Spanish and Italian ladies.

The best guitars in the world, it is said, were made in Cadiz, Spain, and the shape which the instrument took at the hands of the famous PAJEZ family in that ancient city has been adopted, with but few variations, in every country where it has been introduced. An Englishman invented a guitar in which the chords are touched by keys instead of by the fingers. This is called the piano-forte or key guitar. We owe another variation from the Spanish form to JOHANN GEORG STAUFER, of Vienna, who in 1823 invented what he called the *guitare d'amour*. This instrument is of a much larger size than the common guitar, and is held with the bow between the knees in playing. Hence the practical Germans sometimes give it a name signifying "knee guitar." Neither of these forms has, however, come into general use, the graceful and elegant Spanish form of the instrument, slightly modified from the Moorish original, still holding its place in the love of all admirers of guitar music.

One of the most beautiful poems in the language was inspired by a guitar, the exquisite lines which SHELLEY sent to a lady friend with one of these "slaves of music." We have room for a short extract only:

"The artist who this idol wrought,
To echo all harmonious thought,
Felled a tree while on the steep
The woods were in their winter sleep,
Rocked in that repose divine
On the wind-swept Apennine,
And dreaming, some of autumn past,
And some of spring approaching fast,
And some of April buds and showers,
And some of the songs in July bowers,
And all of love. And so this tree—
Oh that such our death may be!—
Died in sleep, and felt no pain,
To live in happier form again:
From which, beneath heaven's fairest star,
The artist wrought this loved Guitar,
And taught it justly to reply,
To all who question skillfully,
In language gentle as thine own;
Whispering in enamored tone
Sweet oracles of woods and dells,
And summer winds in sylvan cells.
For it had learnt all harmonies
Of the plains and of the skies,
Of the forests and the mountains,
And the many-voiced fountains;
The clearest echoes of the hills,
The softest notes of falling rills,
The melodies of birds and bees,
The murmuring of summer seas,
And pattering rain, and breathing dew,
And airs of evening; and it knew
That seldom-heard mysterious sound
Which, driven on its diurnal round
As it floats through boundless day,
Our world enkindles on its way."

The guitar is the perfection of small stringed instruments to be played with the fingers. Among the German peasantry the zithern is a favorite instrument. It has a clear, tinkling, not unmusical tone, but its capacity is very limited. Then we have the banjo, the chief instrument of negro minstrelsy. Its head and neck are shaped like the guitar, while the body is a circular frame, like the head of a drum, over which parchment is stretched in place of a sounding-board. Five strings, of which the fifth is shorter than the others, pass over this parchment, raised above it by a bridge, and are played by the fingers. The name is a corruption of *bandore*, a species of guitar. Its capacity is limited to the performance of simple tunes, and it is used only to accompany the voice in singing. The form in which it was first used by the negroes of the Southern States was rude and clumsy; but those now manufactured for negro minstrel troupes are frequently of elegant workmanship.

REVIEW OF RECENT INVENTIONS.

By EDWARD H. KNIGHT.

[Fourth Article.]

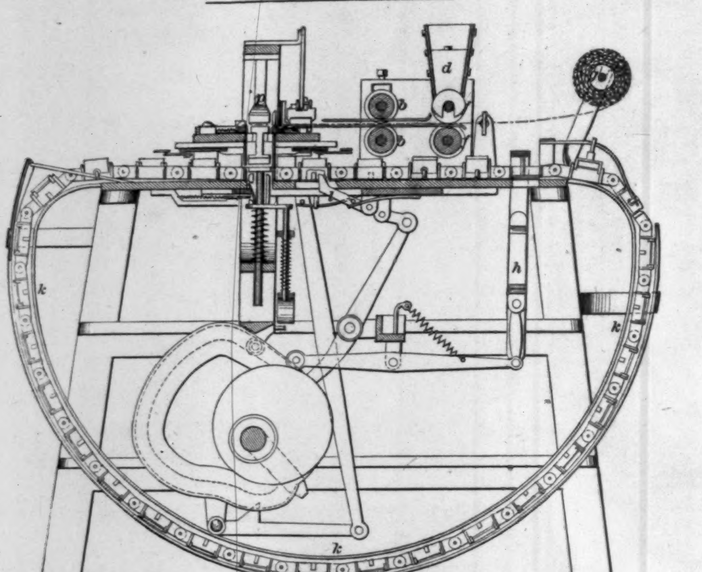

Fig. 81.—PAPER BOX MACHINE.

"ALL the usages of civilized life," says Pliny, "depend in a remarkable degree upon the employment of paper; at all events the remembrance of past events."

When we consider what paper was in his day, and what an inefficient substitute we should have in a sheet of beaten pulp from a fresh-water reed for our paper of rags, we are struck by the energetic way in which the statement is made by this indefatigable old man of eighteen centuries since. We have retained the name, however, for *paper* is but a modification of the word *papyrus*.

The paper made from the papyrus was made of nine different qualities, differing in size, color, and texture. It was made by splitting the successive folds of the stalk into thin laminæ, care being taken that they should be as broad as possible. The inner folds made the finer paper, and the coarser was on the outer wrapping of the stalk, much as we see it in the successive layers of husk around an ear of corn. The different qualities had specific names, but not such a variety as we use at the present day, when we have terms signifying material, size, color, texture, thickness, finish, and purpose.

The flakes of papyrus were united at their edges, to form them into a sheet, by laying them on a board and pressing them wet together; cross layers were laid on, and the width of the sheet was determined by the length of the stalk between the joints. The sheets were then dried in the sun.

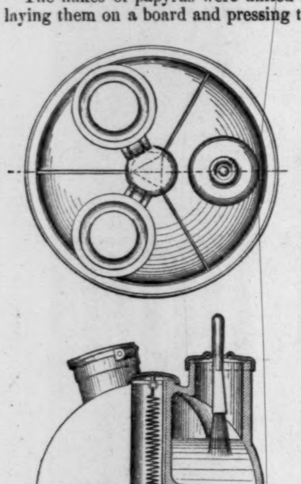

Fig. 82.—INKSTAND AND GUM CUP.

It was a great advance when paper was made of pulp, which was first done in China. It would not be easy to ascertain whether it was first made of bark, in the manner yet practiced in China and Japan, with the inner bark of a species of paper mulberry, or of pulped fibres of cotton. The great change was completed when *true paper was made of rags or other vegetable fibre reduced to a pulp, gathered into a sheet, felted in setting, and dried.*

This Chinese invention was introduced into Europe by the Saracens. The hand methods were universal till about eighty years since, and are now practically discontinued in Europe and America.

Out of the abundance of paper and new needs a great variety of machines have arisen, and among them none more ingenious than those for making paper bags, boxes, envelopes, and collars.

PAPER BOX MACHINE.—Fig. 81 is a machine for making rectangular boxes. The machine consists of mechanisms for feeding the roll of paper, pasting, cutting, folding, and inserting the box into the drying receptacles, and discharging it therefrom, all of which operate automatically. The paper web from the roll, *g*, passes between the rollers, *f f*, by the upper one of which paste from the trough, *d*, is applied to its edges. It is then carried forward by the feed rollers, *b b*, and the necessary slits cut by a vertically reciprocating cutter, after which it is subjected to the action of a plunger, *p*, which shapes it by forcing it within one of a series of moulds on an endless chain, *k*, advanced intermittingly by a pawl, *l*, operated by an oscillating lever from the driving-shaft. The boxes are carried around by the endless chain until they successively arrive in a sufficiently dry condition at a point over an aperture, where they are forced out of the moulds by a vertically reciprocating plunger, *p*.—*Gates*.

INKSTAND.—Fig. 82 is an inkstand made up of three sections, containing black and red ink and mucilage respectively, and held to their common base by a spiral spring and a cap plate.—*Hall*.

SCRIBING INSTRUMENT.—Fig. 83 is an instrument for drawing spirals. The bar of the compass has a rack bar gearing into a pinion, causing the pencil to approach the centre at a uniform rate, thereby describing a scroll. The density of the coils is changeable by the substitution of other pinions.—*King*.

TYPE-WRITER.—The race of fingers on keys in the type composing machine against fingers at the printer's case has been adverted to in one of the earlier articles of this series. Another contest has arisen, and that is fingers on keys in printing letters, against the fingers with the pen in ordinary writing. It is claimed that a few hours' practice will enable a person to write as quickly as with a pen, and by continuous practice a speed of five times that of ordinary writing may be acquired. The writer, using the fingers and thumbs of both hands, depresses one piston after another on to the paper, the surface of which always lies in the centre of the writing ball, *a* (Fig. 84), and each time a letter is produced on the paper the table is caused to move one letter space toward the writer, impelled by the double action of the verge, *v*, caused by the closing of the current in the depression of the piston coming in contact with a spring, whereby electro-magnets attract an armature, causing the movements of the verge, the recoil of which is communicated through a crown-wheel, shaft, another wheel, and a toothed rack to the table. When a line has been thus printed, as indicated by the signal bell, the table is again pushed up to the standards, and a movable tooth affixed under the table engages between two pins on the beam, causing the frame and table to move laterally a distance equal to the distance between two lines, and the apparatus is ready for the second line, and so on continuously.—*Hansen*.

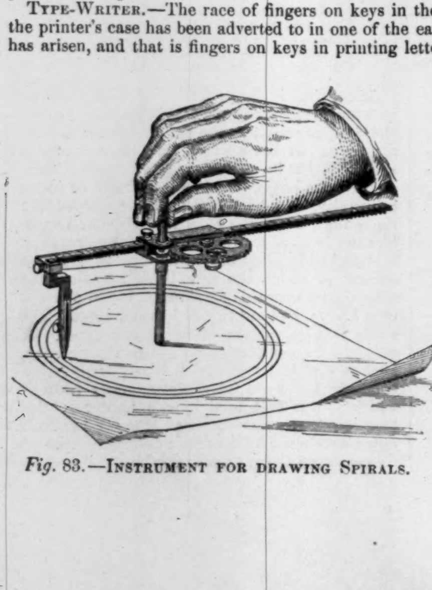

Fig. 83.—INSTRUMENT FOR DRAWING SPIRALS.

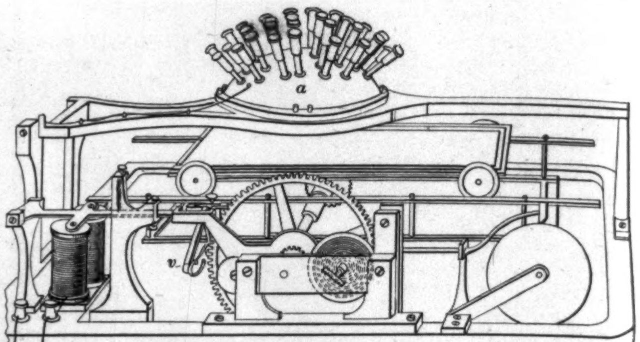

Fig. 84.—TYPE-WRITER.

PHOTOMETER.—Fig. 85 is an application of the well-known Bunsen photometer for ascertaining the illuminating quality of any illuminating gas tested thereby, and the object of this invention is to render the apparatus automatic in its operation, and absolutely correct and reliable in showing the quantity of the gas consumed, the weight of the consumed portion of the test candle, and the time occupied in the consumption. A standard candle supported on a balance arm carries a sliding weight. The consumption of a predetermined amount of the candle allows the arm to tip; its dipping into a mercury cup and closing an electrical circuit to magnets controls devices which cause the candle to be blown out, the gas to be shut off, the meter and a clock to be stopped. The operator is enabled to arrive at the exact quantity of the gas and of the candle consumed by noting, in the first case, the change in position of the gas pointers from that of their positions at commencement, and, in the second case, by placing the balance lever in equipoise by moving the pointer weight 23 from "zero," and noting the number of grains indicated thereby on the scale. If a test for quantity of gas consumed be desired—say, in ten minutes—he changes the switch to "gas," balances the candle, places the dog indicator at "zero," notes the clock time, and when the said dog indicator has made one complete revolution, which indicates ten-twelfths of a cubic foot (the standard for ten minutes' consumption), the same results follow as in the former test, *i. e.*, the cessation of all the movements in the photometer.—*Goodwin*.

Fig. 86 is an instrument used to determine approximately the illuminating value in sperm candles of coal gas and other hydrocarbon gases by burning the same while being forced through an orifice of specific area by a pressure varying from four-tenths to seven-tenths of an inch, the height of the jet flame being adjusted exactly to seven inches. A candle-power scale is spaced and numbered from end to end from 11 to 22; the number and fractions of the candle power of the gas are pointed to by an index bar; motion is given to the index pointer over the face of the candle scale by means of a gas holder in communication with the tank in a well, and connected by a weighted cord with an enlarged pulley fixed to the index bar.—*Hopper*.

TELEGRAPH.—Fig. 87 represents on a small scale a general view of the American fire-alarm telegraph system, embracing the signal station, the central station, the signal circuit, the position of which is shown by the lines *i i'*, *k k'*, and the alarm circuit, the position of which is shown by the lines *d d'*, *e e'*. The drawings also show the connection and mutual dependence of the said several parts. The different stations are shown almost close together for convenience of viewing, but the lines *i i'*, *k k'*, *e e'*, *d d'* must be imagined of indefinite length, reaching from the suburbs, for instance, to a station near the geographical centre of the city. The object of the American fire-alarm telegraph is to give an instantaneous and definite alarm, either general or local, in a city or town, indicating the locality of a fire. The object of the signal station is to indicate the existence and locality of a fire in its neighborhood to the central station or to other signal stations, or to both. The number of signal stations should therefore be multiplied in proportion to the size of the city or town, in order to place one within a suitable distance of every house, and such stations are to be organized to give signals differing from one another, so that each shall indicate uniformly its own location by signalizing its number or other designation, and for fire-alarm purposes it is essential that the signals be either recorded or audibly sounded. The object of the central station is to receive intelligence of the existence and locality of a fire from a signal station in the neighborhood of the fire, and to give a correspondingly public alarm through the alarm-bells, and, if desired, also communicate with the signal stations by means of machinery operated or controlled by telegraphic action or influence emanating from the central station. The object of the alarm-station, which is usually a belfry or bell tower, is to give a public alarm by means of blows upon a bell struck by machinery, the action of which is controlled from the central office or station by telegraph. Instead of a bell, other suitable mechanism for producing sound may be substituted. The function of the signal circuit is to connect telegraphically several signal stations with the central station and with each other, or simply to connect several signal stations with each other for signalizing alarms of fire. The function of the alarm circuit is to connect telegraphically one or more alarm stations with a central station and with each other so as to combine such stations into an alarm system for

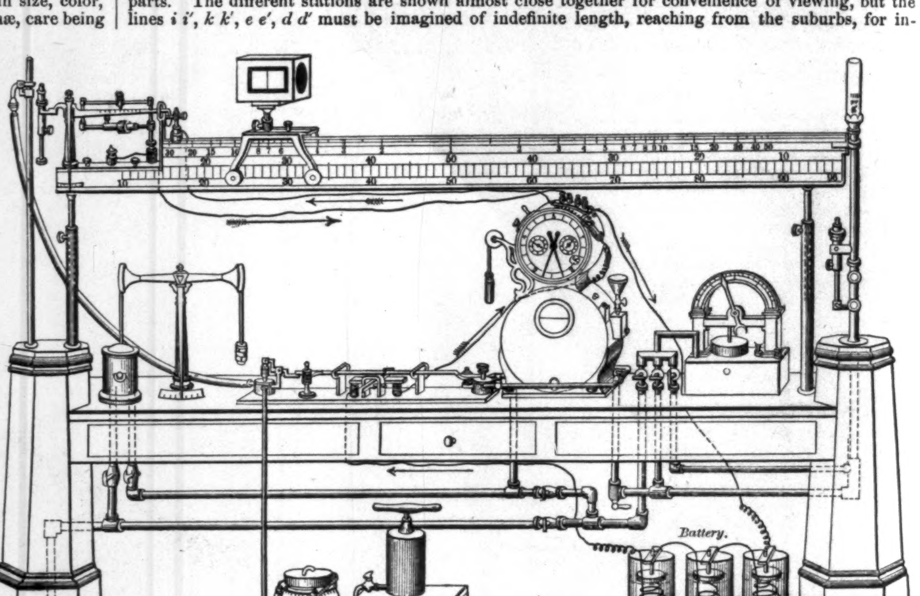

Fig. 85.—ELECTRICAL PHOTOMETER.

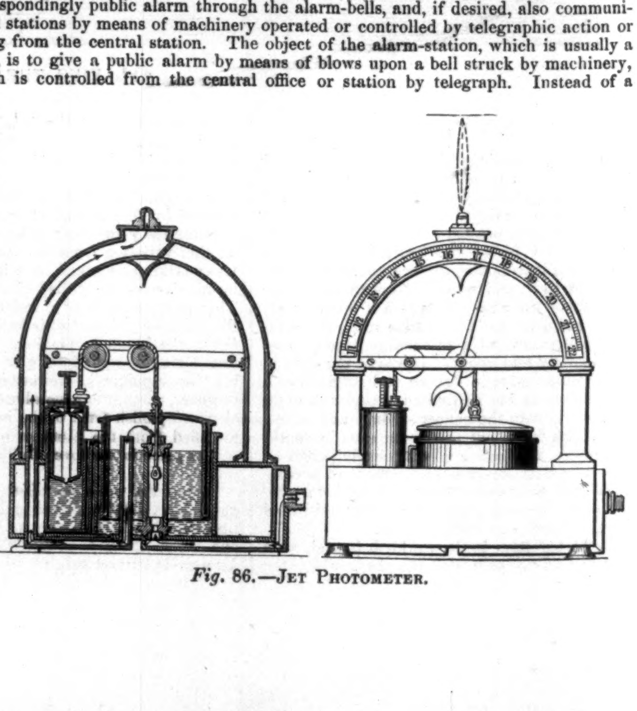

Fig. 86.—JET PHOTOMETER.

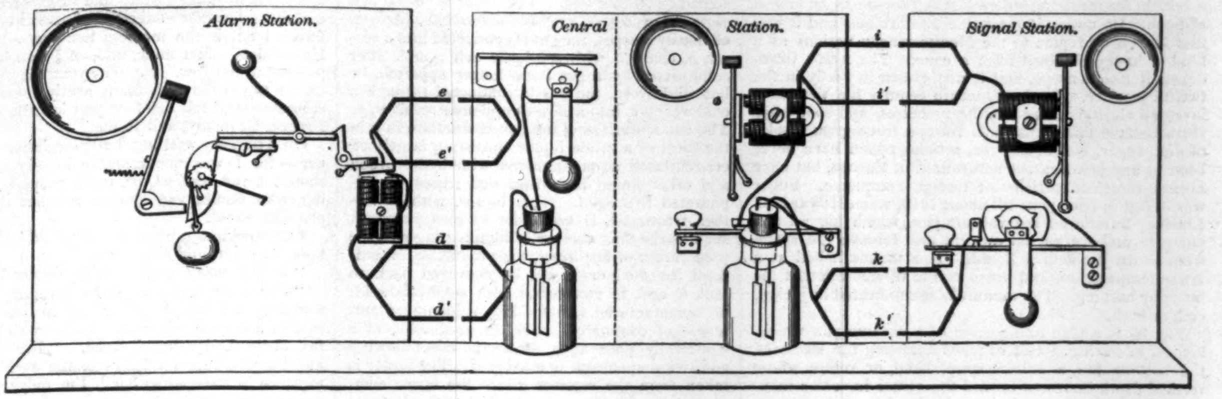

Fig. 87.—ELECTRO-MAGNETIC ALARM TELEGRAPH.

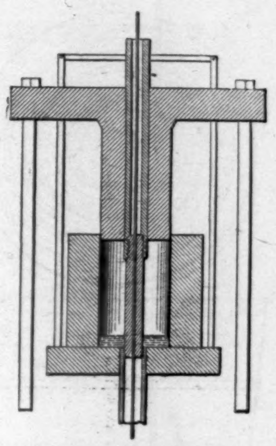

Fig. 91.—MACHINE FOR MAKING PIPE-INCASED TELEGRAPH WIRE.

giving public alarm in case of fire. These are the general features, and, in working, seem to leave little to be desired.—*Channing and Farmer.*

Fig. 88 is Sir Charles Wheatstone's perforator for telegraph paper, designed to be used in connection with the automatic or fast-speed telegraph formerly invented by him, and which comprises three distinct apparatuses indispensable to each other—1, a *perforating machine*, for preparing the messages to be sent on strips of paper or other suitable material; 2, a *transmitter*, or apparatus for receiving the strips of paper so prepared, and for transmitting the currents produced by a voltaic battery, magneto-electric machine, or other rheomotor, in the order corresponding to the holes perforated in the strip, the direction and sequence of these currents being governed by pins so disposed as to enter the perforations, and operating in a manner analogous to that in the mechanism of a Jacquard loom, and the strip being advanced intermittingly by the action of the pins; 3, a *recording* or *printing apparatus*, adapted to print or impress marks on a strip of paper, such marks corresponding in their arrangement with the currents transmitted to the telegraph line and with the apertures in the perforated paper. On the 28th of January, 1867, a patent for Great Britain and Ireland was granted to Sir Charles Wheatstone for various improvements in the constituent parts of this system, the object of which was to effect the printing of the dot and dash alphabet by means of positive and negative currents, which are transmitted alternately in opposite directions, the arrangement being such that the current, whether positive or negative, produces a mark, of which the length varies according to the time that elapses before the current is reversed, such reversal producing an interval or blank space, the length of which continues to increase until the current in the first direction is renewed. In this system no reacting springs, and consequently no adjustments, are required in the printing apparatus, as the alternate opposite currents produce the to and fro

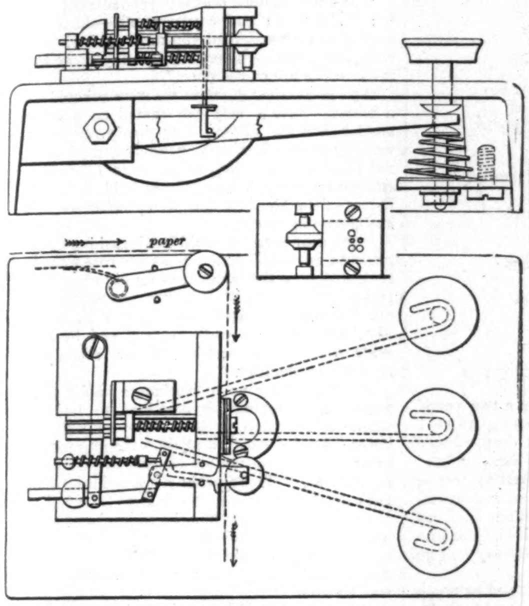

Fig. 88.—SIR CHARLES WHEATSTONE'S PERFORATOR FOR TELEGRAPH PAPER.

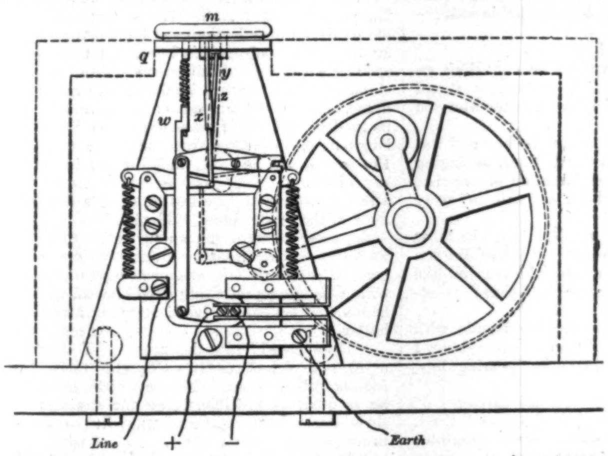

Fig. 89.—SIR CHARLES WHEATSTONE'S TRANSMITTER FOR AUTOMATIC TELEGRAPH.

movements of the marker, and lines of various lengths may be printed, even when instantaneous currents are employed.

Fig. 88 illustrates the *perforator* or punching apparatus suitable for this system. It has three keys, each of which acts simultaneously on a series of punches, so that one key makes the perforations corresponding to a dot, another those corresponding to a dash, and a third those requisite merely to advance the paper. The upper portion represents a vertical section of the instrument, the lower portion a horizontal section, showing the positions of the three keys. The punches are five in number, and are arranged in two lines, three punches being in one transverse line, and two punches in the other transverse line. The plan of the punching plate of the instrument is represented in the small figure, the exterior and larger apertures being intended to receive the pins of the transmitter, which determine the transmission of positive and negative currents, and the middle and smaller apertures for the continuous and regular movement of the paper. The strip of paper thus prepared with suitable perforations is then ready to be passed through the transmitter.—*Wheatstone.*

Fig. 89 is the *transmitter* suitable to this system. After the strip of paper has been prepared by means of the *perforator* just described, it is placed in the *transmitter*, shown in elevation in Fig. 89. The transmitter regulates the passage of the electric currents along the telegraphic line from a voltaic battery or magneto-electric machine in accordance with the arrangement of the perforations in the paper strip. The rotation of the axis, which may be effected by means of a weight or any other motive power, actuates the mechanism that gives motion to the paper strip, and that makes the contacts according to the perforations on the paper. It has a rocking piece, *m*, with a groove, *q*, to receive the paper strip, a spring clip, *w*, which holds the paper firmly during the recession of the rocking piece, and three wires or pins, *x*, *y*, *z*, placed transversely to the paper strip, which, by entering the external apertures thereof, or by being prevented from entering the paper by the absence of apertures, regulate the succession, frequency, and direction of the electric currents sent into the telegraphic circuit.—*Wheatstone.*

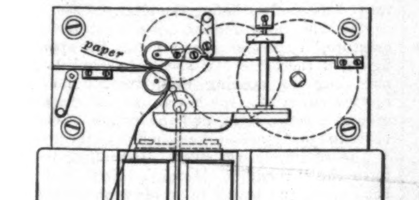

Fig. 90.—SIR CHARLES WHEATSTONE'S RECEIVER FOR AUTOMATIC TELEGRAPH.

Fig. 90 illustrates the *printing receiver* suitable to this system. This printing receiver is prpvided with an improved method of marking lines by means of ink upon moving strips or bands of oaper, the characteristic distinction of which is that the inking disk and tracing disk are both independently kept in action by the maintaining power, and are not in actual contact with each other, and that the ink is retained on the circumference of the inking disk by capillary attraction. The printing apparatus consists, first, of a trough of fluid ink; second, a vertical disk, grooved at its circumference, which takes the ink from the reservoir, and holds it in its groove by capillary attraction while it is kept in motion by the maintaining power; and third, of a smaller disk, called the tracer or marker, which, touching the ink retained in the groove, without coming in contact with the larger disk itself, is also kept in motion immediately by the maintaining power. The marking or tracing disk is so mounted that its axis, while rotating, is capable of being moved by the action of the electro-magnets, so as to bring the disk in contact with the paper. A current in one direction causes the marking disk to move toward the paper and trace the line, and the current in the opposite direction removes the disk to form the intervals, the residual magnetism of the electro-magnet retaining the magnetic armature, and consequently the tracing disk, in its position until a contrary current inverts the magnetism, and causes the armature to move from the opposite side and the tracing disk to recede from the paper.—*Wheatstone.*

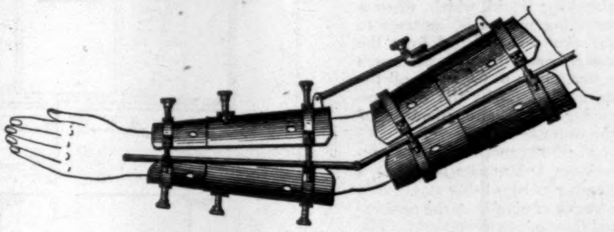

Fig. 92.—ARM-FRACTURE APPARATUS.

Fig. 91 is a machine for making pipe-incased telegraph wire. The wire is introduced into the pipe simultaneously with the manufacture of the latter, being passed down an axial opening through the core of the pipe press. As the ram of the press descends, the lead escapes at the annular opening around the tubular core, and the wire is payed out from the reel at an equal rate. The wire is loose in the pipe.—*Honey.*

FRACTURE APPARATUS.—Fig. 92 is a splint for a fractured arm. The concavo-convex metallic splints are made up of compound plates, which adjust upon themselves both laterally and vertically. Clamping bands with set screws adjust along jointed rods, which sustain the apparatus. Additional narrow pressure bars adjust so as to press between the two bones of the lower arm.—*Bissell.*

Fig. 93 is a pair of fracture boxes for the leg and thigh respectively. The bed-plates are adjustable laterally and vertically. The foot-rest also adjusts to the various positions required. Pressure bars are added, which may be forced against the limb at various points desired. The upper and lower parts of the fracture box are held at various angles to each other as required. An extension of one side passes up and rests in the armpit to form a counter-extension. A peculiarly constructed bandage secures the foot to its adjustable plate. Hooks connected in pairs hold the bandage when required in changing parts of the apparatus and in bandaging.—*Bissell.*

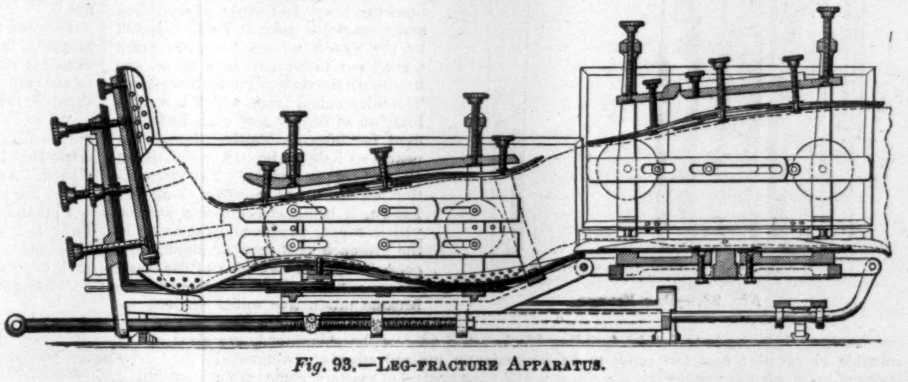

Fig. 93.—LEG-FRACTURE APPARATUS.

DENTAL APPARATUS.—Fig. 94, *a*, is a burring and finishing tool for dental engines. The burring wheel is arranged so that it can be set at any required angle, and has wires attached for holding a sponge to contain water for cooling the wheel.—*Hickman.*

b is a flexible shaft for dental engines; it is a chain covered with rubber or gutta-percha.—*Starr.*

c is a flexible shaft for dental engines; it has a catgut core with coiled wire envelope.—*Starr.*

Fig. 95 is a clamp for embracing the crown of the tooth so as to press down upon it the rubber which forms what is known as the *dam*, to exclude saliva from the hole when filling a carious tooth.—*Hickman.*

Fig. 94.—DENTAL APPARATUS.

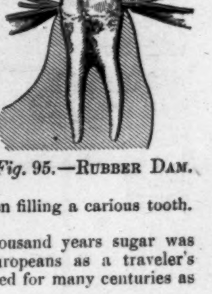

Fig. 95.—RUBBER DAM.

SUGAR.—For a thousand years sugar was merely known to Europeans as a traveler's wonder, and it was used for many centuries as